LAMP

Linking Agricultural Markets to Producers

Selection Process Results

Findings on the highest potential clusters and products

November 2003

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Rural and Agricultural Incomes with a Sustainable Environment (RAISE)
Contract No. PCE-1-00-99-00001-00
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Authorship of this Report was primarily the work of Mark Huisenga, ARD's Senior Technical Adviser for the Linking Agricultural Markets to Producers (LAMP) Project. He was greatly assisted in this writing by Brian Fahey, the Project's Chief of Party. The data for the Value-Chain Constraints Assessment and price-point analysis were gathered by LAMP staff assigned to specific regions:

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- **Mostar**: Mr. Paul Forrest and Ms. Katica Poljo
- **Tuzla**: Mr. Dennis Zeedyk and Ms. Meriha Manojlovic.

The Team also conducted the informational interviews that have contributed to the analysis.

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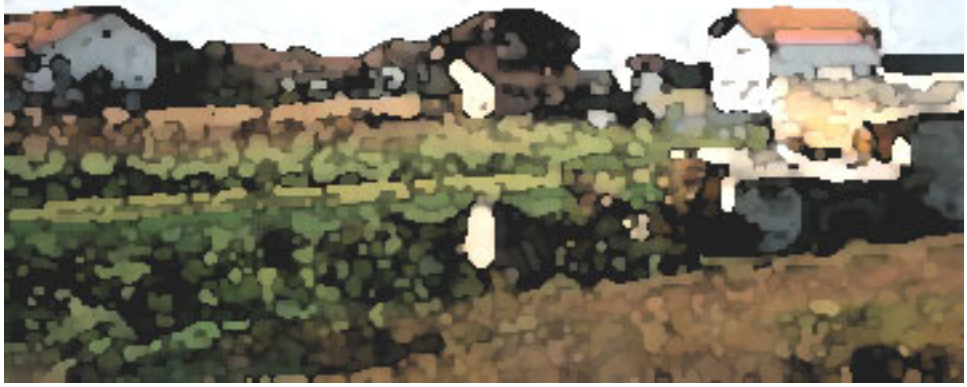


1.0 Introduction

This report on Selection Process Results presents the LAMP Team's findings on the highest potential clusters and specific products that will receive assistance, including technical assistance and training, grants, and support for microfinance lending to farmers. The LAMP Team developed criteria to guide cluster selection on the basis of the Activity's overall objectives. LAMP's main objective is to support ***sustainable production and sales of value-added agricultural products.***

The approach to identifying clusters for assistance and to select specific products is driven by their potential to compete in the marketplace. The process that the Team employed and the steps taken were designed to rapidly assess the prospective for Bosnia and Herzegovina's (BiH) agriculture sector and prioritize and focus on a manageable number of products for more detailed analysis. The mix of agricultural opportunities is likely to be different for selected products within each of LAMP's targeted regions: Banja Luka, Mostar, Sarajevo, and Tuzla. To improve our understanding of the opportunities and constraints to the supply of raw materials, the Team completed a systematic analysis through the collection and compilation of information from current value-chain participants. This initial assessment involved interviews with high-potential agro-processors.

The Team's choice of analytical techniques was influenced by the lack of secondary data on BiH's markets. This lack of data meant that the Team has had to gather primary data using techniques capable of combining qualitative information with quantitative analysis. The secondary data that are available on BiH—although not wholly reliable—indicate products with potential and suggest which products to eliminate from further consideration. Further, some sectoral studies have been done that identify product opportunities not captured by any data (e.g., herbs). Where available, the Team has used these studies to guide its further investigation. The Team used five different analytical techniques, or steps, which are described in greater detail below.

2.0 Product and Market Selection Process

The LAMP Team followed a data collection process that encompassed five steps to arrive at the results described in this report. These steps are:

① **Consolidate and synthesize market analysis secondary market information**. Drawing on existing studies of BiH's agricultural competitiveness and on secondary data from the Food and Agriculture Organization (FAO), the European Commission (EC) study on agribusinesses and textiles, and other sources within BiH, the Team developed a long list of potential products for more detailed investigation. This step has provided the Team with indicative information and helped eliminate some products from further consideration.

② **Assess value-chain constraints of highest priority products**. This rapid assessment methodology used information from key informants within the sector to determine the factors that limit BiH product competitiveness. A comparative analysis of supply-chain factors determines the relative importance of these factors to each other. Through this step, the Team was able to:

- Estimate the intensity of constraints for each important value-chain factor.
- Determine the relative importance of constraints across subsectors.

③ **Collect price-point data in selected regions for targeted products**. *Price-point* data were gathered on the prices of specific goods in selected locations. These data were analyzed by comparing the price of goods produced in BiH with imported goods, among LAMP's targeted regions, and between different sales venues. The results indicate the general cost competitiveness of BiH products, their availability in different shopping venues, price ranges and differentials, and the pricing opportunities that may exist for BiH products relative to imports, although without the benefit of time-series information.

④ **Conduct informational interviews with key informants and clarification surveys**. Team members interviewed key informants through meetings, company visits, and other research to illuminate information that was gathered during the previous steps, thereby enabling the Team to narrow down the number of targeted products.

⑤ **Carry out *T-Account* analysis**. This analysis scored each short-listed product on the basis of the Cluster Selection Criteria set out above. Through this analysis, the Team evaluated all of the products that have been considered on an equal basis. There are many products for which data do not exist and other products that were not examined assessed during the constraints and price-point analyses, although key informant surveys indicate that certain of these products have potential. The *T-Account* analysis has helped to quantify all of the products under consideration equally.

3.0 Selection Process Results

The LAMP Team has completed the five steps described above. The findings are presented in the following sections.

3.1 Step One: Market Analysis

An initial quantitative and objective method of determining the subsectors or products with which LAMP might work was done through market analysis (see Attachment 1). Starting during the second week and continuing through the third week in country, data were obtained from 1992 to 2002 for selected products or concentrations of the agricultural economy. Data included total domestic supply, total BiH production, total imports, and total exports. On the basis of this information, the average annual growth of production, imports, exports (where they exist), and market was calculated. Growth calculations are restricted exclusively to the post-war period—from 1996 to the present. Information was collected for the following subsectors:

Subsectors Considered

- ***Cereals***: maize, wheat, barley, oats, etc.
- ***Dairy***: milk, cheese, yogurt, butter, ice cream
- ***Fruit***: apples, plums, pears, cherries, grapes, berries, juices & syrup, etc.
- ***Vegetables***: potatoes, carrots, onion, garlic, tomatoes, cabbage, and paprika
- ***Meat***: beef, mutton, pork, and fish
- ***Poultry***: broilers and eggs
- ***Oilseeds***: rapeseed (canola) and sunflower oil
- ***Special***: nuts, wine, and honey.

Growth

Using actual data and calculating ***growth***, from 1996, were deemed to be relevant indicators of what has actually happened in these subsectors, although past performance may not be a true indicator of future growth. LAMP is committed to working with high-value products that have high growth potential. The following products have exhibited growth rates exceeding 20%, although not all of them are high-value products:

- Juices & syrup
- Oats
- Butter
- Sunflower oil
- Maize
- Milk.

Volume and Growth

As a means of characterizing market opportunities related to ***volume and growth*** of selected products, we designed the following table (Table 1), plotting selected products in the relevant quadrant.

Table 1. Volume and Growth of Selected Products

	Low Volume (<25,000 MT)	High Volume (>25,000 MT)
High Growth (>5%)	Berries Butter Honey Ice cream Juices & Syrup Wine Yogurt	Barley Fruit Maize (feed) Milk Oats (feed) Pork Sunflower oil (re-exports) Vegetables Wheat
Low Growth (<5%)	Cheese (except selected types) Eggs Nuts (negative growth)	Potatoes (negative growth) Broilers

Briefly reviewing these results for the various products, we see the following highlights:

- Dairy/meat/feed and related products combine to make the strongest cluster of related products, including milk, ice cream, cheese, yogurt, butter, maize, oats, and different meat products.
- Fruit and derived products such as juices, syrups, and wine show promise as another potential related cluster.

In these clusters of related products, there are opportunities to create new synergies. For instance, feed can be formulated to improve milk quality as well as meat quality.

Several caveats qualify the foregoing analysis. Since BiH production has been increasing from a very low base following the war, growth is greater than regional averages. Also, for a number of product categories there are subcategories that may or may not be performing as well; however, the only data for these are anecdotal. One example is cheese: where as an overall category its growth has declined, certain specialty cheeses — such as Travnik—are increasing.

The implications of this analysis for the selected products are characterized in Table 2.

Table 2. Analysis Implications

	Low Volume	High Volume
High Growth	First mover advantage Many new entrants/high failure rate Attracts large firm diversification Success requires large market share Difficult investment conditions	Many aggressive new entrants Attracts large-scale competitors Good potential margins High initial capital requirements Insufficient capacity
Low Growth	Highly price competitive Low margins likely Established competitor advantage Substantial cost pressures Pressures for market segmentation	Favors existing competitors Intense price competition Capacity utilization problems Difficult to segment market Difficult to expand market share

3.1 Step One: Market Analysis (continued)

In BiH, a high growth rate would be greater than 5% annually and high volume would include products exceeding 25,000 metric tons (MT) annual production. This 5% growth rate compares favorably to rates of growth for agricultural products in other Eastern European countries where rates are, in general, much lower (see Attachment 2). To the maximum extent possible, LAMP should seek to work with product clusters in the high-volume/high-growth quadrant and avoid working with product clusters in the low-volume/low-growth quadrant.

Volume/Growth Quadrants Summary

Specifically, evaluating the opportunities for the project to work with the subsectors in these quadrants we find:

- **High-growth/high-volume subsectors**. Substantial opportunity to meet project objectives.
- **Low-growth/high-volume subsectors**. Need to work with established companies, since entering these subsectors is high risk for new entrants and low risk for established firms. Owing to high volume, there is good opportunity to meet project objectives.
- **High-growth/low-volume subsectors**. Likely to be high risk and a high failure rate; many new entrants with problems of picking winners. These subsectors lack volume, and it will be difficult to meet project's objectives. The best opportunities will be to work with "first movers."
- **Low-growth/low-volume subsectors**. Small opportunity to meet project objectives.

Value

The ***value*** of each subsector was calculated (*value* is denoted by international and domestic prices) on the basis of international market prices. The products that fall into the category of high growth by market value are in order as follows: ice cream, juices & syrups, oats, butter, broilers, sunflower oil, maize, and milk.

Combined Measures

Combining all three measures of high volume, high value, and high growth reveals:

- Pork and pork products
- Maize
- Milk
- Wheat
- Fruit
- Broilers
- Vegetables.

Using current trends, these products should be considered by LAMP for assistance.

Besides conducting the foregoing analyses, the Team reviewed existing studies for information relevant to the selection of potentially competitive products. Among these studies key resources are:

3.1 Step One: Market Analysis (continued)

Study Findings

Of particular relevance to LAMP, the *Agribusiness and Textiles* study provides extensive analysis, including product-specific SWOT analysis, of BiH's agribusiness sector. On the basis of indicators of market size, import competitiveness, market structure, and potential competitiveness, this study ranked products as follows:

1. Dairy
2. Meat + Fish
3. Poultry
4. Vegetables

- *Agribusiness and Textiles in Bosnia and Herzegovina, Phase I Agribusiness Report: Sector Strategy and Enterprise Screening*, Res&Co/Agrisystems Limited for European Commission, July 2002 (see Text Box).
- Reinauer, Edward and Imelin Imsirovic, *A Market Intelligence Brief for the Agribusiness and Food Processing Sector*, USAID Business Consulting, Sarajevo, April 2000.
- *Development Strategy BiH–Poverty Reduction Strategy Program: Agriculture Sector Priorities*, Annex 5, Working Groups FBiH/RS, October 2002.
- *Bosnia & Herzegovina Stabilization & Association Process: Feasibility Study*, Bosnia & Herzegovina Council Of Ministers, Directorate Of European Integration, Sarajevo, Trg Bih 1/III, June 2003.
- *Bosnia and Herzegovina Agribusiness Study: Final Mission Report*, International Finance Corporation, South East Europe Enterprise Development (SEED), Sarajevo, January 2001.
- *Agriculture Sector Review in Bosnia and Herzegovina*, Institutional Support to the Ministries of Agriculture, EC/BIH/00/032, Vakakis International S.A., Sarajevo, 2001.

There are a number of reports that also proved very useful for their analysis of specific subsectors. Selected reports covered such topics as dairy products, livestock and meat products, poultry products, berries, vegetables, and medicinal plants and herbs. Findings and data from these reports have been incorporated into the LAMP Team's own analyses.

3.2 Step Two: Value-Chain Constraints Analysis

LAMP staff started meeting with agribusinesses during the second week in country. During the second through the fourth week of September, the Team surveyed the visited companies to determine the level of constraints on agricultural businesses in BiH. This was done to identify and segregate, in an objective and quantitative way, the strongest and weakest products and/or subsectors of the agricultural economy. It was hoped that this exercise would help the Team determine which products/subsectors need the least or most assistance and in which subject areas the assistance is needed.

The survey listed the following 18 market value-chain subjects as possible areas of constraint:

Inputs/Raw material	Raw material quality	Transport
Infrastructure	Processing (conditions)	Storage
Packaging	Credit	Shelf life
Operations & maintenance	Management resources	Environmental impact
Market information	Market clearing	Market requirements
Marketing	Interference	Policy

Each of the four LAMP offices was given blank forms (a completed form is shown as Table 4, p. 9) for the Value-Chain Constraints Assessment, which the Team used to gather data from companies throughout BiH. Each of the constraint subjects could be assigned a score ranging from

3.2 Step Two: Value-Chain Constraints Analysis (continued)

1 to 5, with 1 being a *minimum constraint* and 5 being a *binding constraint*. Approximately 30 different companies were interviewed throughout BiH. Constraint scores were assigned for each subject by individual LAMP Team members after each interview.

Data were sought from companies or individuals working with one or more of the 25 products or subsectors, shown in the left column of Table 3. The selection was based on suggestions from the entire LAMP staff in an effort to include as many subsectors of the agricultural economy as possible.

Upon completion, 19 subsectors had been covered through interviews with BiH companies (noted in the second column of Table 3). Constraint scores were then summarized for each subsector. In cases where data were gathered from more than one company in a subsector, an average of the scores was used. Finally, constraint scores for each subsector were tabulated across the value chain and across industry subsectors for a total score and for an average. The subsectors were then ranked from *most constrained* to *least constrained*. This ordinal ranking is shown in the third column of Table 3. The fresh fruit and vegetable sector was the most constrained; the swine sector the least.

Table 3. Subsectors, Ranked by Constraint
(a score of 1 is *least constrained)*

Subsectors/Products	Interviewed?	Subsector Ranking by Constraint
1. Eggs[1]	No	——
2. Yogurt[2]	No	——
3. Flour[1]	No	——
4. Berries[3]	No	——
5. Plums[3]	No	——
6. Bakery goods[1]	No	——
7. Confectionery[1]	No	——
8. Swine production	Yes	1
9. Cheese	Yes	2
10. Meat processing	Yes	3
11. Cut flowers	Yes	4
12. Seed potatoes	Yes	5
13. Honey	Yes	6
14. Fish	Yes	7
15. Grapes/Wine	Yes	8
16. Sheep/Goat	Yes	9
17. Juice	Yes	10
18. Herbs	Yes	11
19. Oilseeds	Yes	12
20. Jam/Marmalade	Yes	13
21. Canned vegetables	Yes	14
22. Milk	Yes	15
23. Poultry–broilers	Yes	16
24. Beef	Yes	17
25. Fresh fruit & vegetables	Yes	18

[1]Covered in later interviews (see *T-Account* analysis).
[2]See Milk subsector.
[3]See Jam/Marmalade and/or juice subsector.

3.2 Step Two: Value-Chain Constraints Analysis (continued)

The constraint scores were also analyzed across subsectors to determine how one constraint compared with another. For example, credit was consistently a serious constraint compared with the other constraints. Results of this analysis are shown in Figure 1, which shows the relative intensity of each constraint (*score* is shown in blue shade). The completed Value-Chain Constraints Assessment, aggregated by region, appears as Table 4 on p. 9.

The results of these analyses will be compared with the other methods to determine the subsectors with which LAMP will be working.

Figure 1. Relative Intensity of Each Value-Chain Constraint

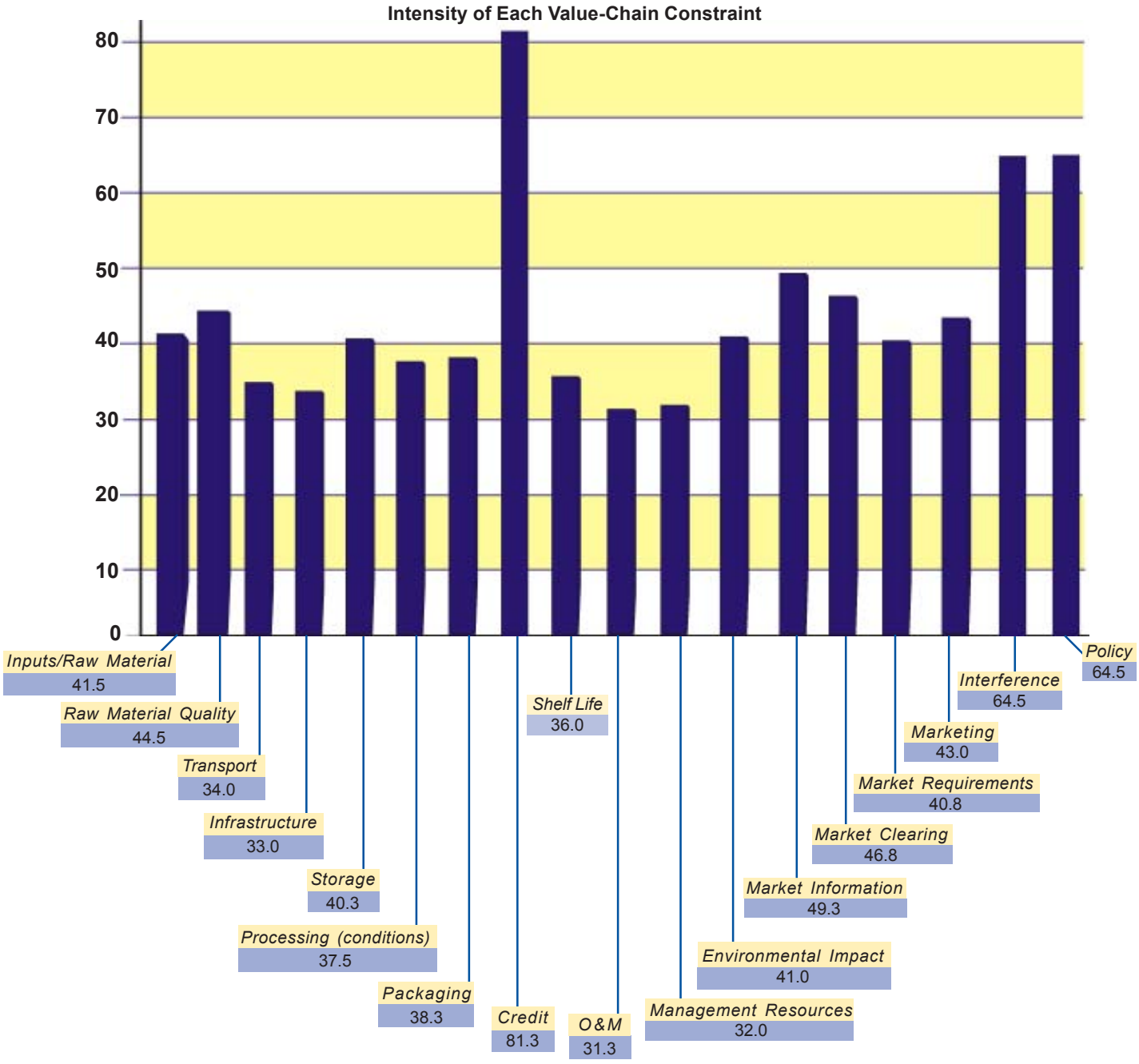


Table 4. Value-Chain Constraint Assessment*
Bosnian Summary

Product	Inputs/Raw Material	Raw Material Quality	Transport.	Infrastructure	Storage	Processing (conditions)	Packaging	Credit	Shelf Life	Operation & Maintenance	Management Resources	Environmental Impact	Market Information	Market Clearing	Market Requirements	Marketing	Inteference	Policy	Score	Average
Swine	1	1	1	1	1	1	1	3	1	1	1	2	1	1	1	1	2	2	23	1.28
Cheese	1	1	1	1	3	1	1	5	1	1	1	1	1	1	1	1	2	2	26	1.44
Meat processing	2	2	1	1	1	1	1	3	2	1	1	1	1	1	1	1	3	2	26	1.44
Cut flowers	1	1	1	2	2	1	1	4	2	1	1	1	2	3	1	2	3	1	30	1.67
Potato-Seed	1	3	1	1	2	2	1	5	1	2	1	1	2	3	1	1	4	3	35	1.94
Honey	1	1	2	2	1	2	2	5	1	1	1	1	3	2	1	2	4	3	35	1.94
Fish	1	4	1	1	3	2	1	4	1	1	1	1	1	2	1	1	5	5	36	2.00
Grapes/Wine	3	1	1	1	1	1	1	5	1	1	1	1	3	3	1	3	4	4	36	2.00
Sheep/Goat	1	3	1	1	1	1	1	5	2	1	1	3	4	4	4	1	1	2	37	2.06
Juice	2	2	2	2.5	2	2	1.75	3.5	2	1.75	2	3	2	2	2	2	3.5	3.5	41.50	2.31
Herbs	2	2.5	2.5	2	2	2	2.50	5	2	2	2.5	1.5	3	2.5	3	2	2	2.5	43.50	2.42
Oilseeds	3	2	3	2	2	2	2	4	2	2	3	4	2	3	2	2	2	4	46	2.56
Jam/Marmalade	2.5	2	2	3	2	2.5	3.25	4	1.5	2.25	2.5	3.5	3.50	2	3.50	3.5	3.5	3.5	50.50	2.81
Canned vegetables	2.5	2	2	3	2	2.5	3.25	4	1.5	2.25	2.5	3.5	3.50	2	3.50	3.5	3.5	3.5	50.50	2.81
Milk (and products)	3.5	3	3.5	2.5	2.75	2	2	3.75	2	2	2.5	2	3.25	2.75	3.25	3.5	3.5	4	51.75	2.88
Poultry	3	3	2	2	2.50	2.5	2.5	4	3	3	2	3.5	3	2.50	2.50	3.5	3.5	4.5	52.50	2.92
Beef	4	4	2	2	2	3	3	4	2	2	2	3	3	2	3	3	5	5	54	3.00
Fresh fruit & vegetables	3	4	1	1	5	5	5	5	5	1	1	4	4	5	3	4	5	5	66	3.67
Eggs																				
Yogurt																				
Flour (milled grain)																				
Berries																				
Plums																				
Score	**41.50**	**44.50**	**34.0**	**33.0**	**40.3**	**37.5**	**38.3**	**81.3**	**36.0**	**31.3**	**32.0**	**41.0**	**49.3**	**46.8**	**40.8**	**43.0**	**64.5**	**36.0**	**799.30**	**44.40**
Average	**2.18**	**2.34**	**1.79**	**1.74**	**2.12**	**1.97**	**2.01**	**4.28**	**1.89**	**1.64**	**1.68**	**2.16**	**2.59**	**2.46**	**2.14**	**2.26**	**3.39**	**1.89**	**42.07**	**2.34**

*1 = *minimum constraint*, 5 = *binding constraint.*
Products in yellow-shaded rows were examined as part of a broader category assessment (e.g., berries and plums as subcategories under *Fresh Fruit & Vegetables*).

3.3 Step Three: Price-Point Analysis

A third quantitative and objective method of selecting the subsectors or products of the BiH agricultural economy in which LAMP might work was done through price-point analysis (see Attachment 3). During the first two weeks in BiH, price data were collected from Tuzla, Mostar, Banja Luka, and Sarajevo on staple food items in the green market, grocery stores, supermarkets, and other retail shops. Price for each food item and descriptive information (e.g., brand name, place of origin, size of the container, etc.) were obtained. The following food information was collected for analysis:

Food information collected

1. Milk	2. Cheese	3. Butter	4. Yogurt	5. Cream
6. Flour	7. Beef	8. Mutton	9. Pork	10. Fish
11. Poultry	12. Eggs	13. Fruit jams	14. Fruit juices	15. Fresh fruit
16. Honey	17. Vegetables			

Once the prices were collected, they were converted to a per-kilogram or per-liter basis for equal comparison. Prices were then listed by city, and a price average was obtained for domestic products and for imported products from the green market, grocery store, supermarket, and other retail shops. Finally, the domestic price was compared with the imported price across each market to determine the absolute difference and the percent difference.

A positive difference meant that the domestic BiH product was cheaper than the imported one, indicating that a possibility exists for this subsector to compete. If the number was positive and large on a percentage basis, it is likely there is even more opportunity to compete. The following items have domestic prices that are more than 10% positively different from the imported prices:

Products with Promising Pricing Potential

- **Butter**
- **Fruit jams**
- **Yogurt**
- **Fruit juices**
- **Pork**
- **Honey**

Given the relatively large difference between the imported price and the domestic price, domestic producers of these products may have an opportunity to increase prices, thereby also increasing profits.

3.4 Step Four: Key Informant Interviews

Our meetings, company visits, and research revealed some of the following subsectors as containing good potential for competitive growth (see Attachment 4). Although our research is continuing, the subsectors listed in Table 5 appear to be good opportunities for BiH.

3.4 Step Four: Key Informant Interviews (continued)

Table 5. Key Informant Interview Results

Sector	Comments
Dairies	Growing sector, very competitive, but opportunities for further growth and import substitution.
Livestock & meat products	Growth potential is variable, though it is a relatively high-volume sector.
Poultry	Growth potential is spotty, but it is a relatively strong sector.
Fruits, berries, & vegetables	Strong traditional sector, organic potential, high-growth potential.
Fisheries	Superior environment, growing sector, great potential for local consumption and exports, high value though low volume.
Wine	Unlikely to compete against premier wine-producing countries, but local and regional prospects are good.
Medicinal plants & herbs	Growing sector, great potential.
Oilseed	Although in its infancy, this was once a very large industry in Bosnia that supported many farmers; great potential.

Although organic foods are occasionally discussed as a separate sector, it is likely that LAMP will treat organic foods as differentiated products within the above sectors.

3.5 Step Five: T-Account Analysis

The *T-Account* analysis scores each of the considered products on the basis of the Cluster Selection Criteria, weighted by priority according to LAMP project guidelines. The criteria used as the basis for selecting the final product clusters and markets and their rationale are as follows:

- ***Product has good potential for broad-based impact and yield enhancement***. Broad-based impact relates to the number of commercial producers that may be impacted, a key determinant of which is market size. If there are currently comparatively low yields, even higher volumes could be realized with project support.
- ***Potential market through substitution of imports***. Markets that have a high percentage of imported goods may be targets of opportunity for local producers and processors if they are able to realize advantages of customer proximity, transportation, raw material, consumer preference, and other cost and marketing parameters.
- ***Existing market conditions; trends in volume, growth, and value***. Current market conditions are relevant indicators of future market conditions. Volume (domestic production + imports), the rate of growth, and international (for imported goods and potential exports) and domestic prices influence production sustainability and value-added product sales.
- ***Export potential***. Companies that export successfully are demonstrating their market competitiveness by meeting buyer specifications for their products. Such companies can lead future value-chain investment and innovation.

3.5 Step Five: T-Account Analysis (continued)

- ***Significance of sectoral constraints***. The Value-Chain Constraints Assessment indicates which products face the highest/fewest number of constraints; working with products with a higher number of constraints that are difficult to overcome will have a higher risk of failure.
- ***Opportunities to diversify away from low-cost strategies***. Competing on cost is the most difficult competitiveness strategy to sustain; clusters showing evidence of being able to diversify into value-added products or services are in a position to gain competitive advantage. Diversification strategies enable a given supplier to meet the needs of the end-user or final consumers. Knowing what these needs are requires being close to customers to be able to respond to markets' changing needs.
- ***Historical production/processing ability***. It is easier to deal with products for which people have some knowledge and experience.
- ***Distinctive/unique product characteristics***. The more distinctive a valued product is, the more readily it can compete for market share and attract a profit premium.

As the final step in the Team's short-listing process, the *T-Account* analysis considers the positive and negative weights of each product against each criterion (see Attachment 5). To appreciate how different criteria affected the *T-Account* results, we calculated three variations of the accounts. The first variation includes all of the criteria, the second variation strips out "export potential," and the third variation removes "broad-based growth." For LAMP's purposes, the first variation is the most important and is the benchmark by which we are establishing our final short list of products for the Team's focus. Table 6 displays the results for each of these *T-Account* variations.

Table 6. *T-Account* Variations

Rank	Variation 1: All Criteria	Variation 2: Minus Exports	Variation 3: Minus Broad-based	Variation 4: Exports Only
1	Pork/Products	Pork/Products	Pork/Products	Herbs
2	Butter	Butter	Grapes/Wine	Fish
3	Yogurt	Yogurt	Butter	Berries
4	Processed Meats	Processed Meats	Yogurt	Wine
5	Grapes/Wine	Dairy/Milk	Ice Cream	Cheese
6	Dairy/Milk	Grapes/Wine	Processed Meats	Vegetables
7	Cheese	Juices & Syrups	Berries	Fruit

As one can see from the summary of our analyses, the highest potential products are shown in Variation 1. As might be expected, exports play an insignificant role in relation to product selection. On the other hand, dropping the LAMP criterion *broad-based growth potential* from the analysis does impact significantly on product ranking. Considering just export market potential, a very different rank emerges: herbs, a current export product, tops the list.

3.5 *Step Five:* T-Account *Analysis* (continued)

Note, however, that there are many products for which data do not exist and other products that could not be examined during the Constraints and price-point analyses. Since completing these analyses, the Team has been able to obtain some promising information on some other products. Products such as herbs, butter, cut flowers, ice cream, eggs, juices, jams, and yogurt are certainly of interest but, owing to a lack of information, could not be effectively analyzed. However, key informant surveys indicate that certain of these products do have great potential. Hence the *T-Account* analysis helps to quantify all of the products under consideration relatively equally in accordance with the Cluster Selection Criteria.

High-potential clusters

From the *T-Account* analysis, any product with an overall score of 10 or higher will be considered as having high potential for LAMP support. The following clusters and related products fall into the category of 10 or above:

- ***Meat***: Processed—in contrast to fresh—meats of all kinds (though mainly beef and veal), pork and pork products, and poultry broilers
- ***Dairy***: Milk, butter, yogurt, and cheese
- ***Fruit***: Fresh fruit, berries, juices and syrups, and wine
- ***Vegetables***: Fresh.

Besides the foregoing products, the LAMP Team will establish a *Specialty Products* category that will allow us to opportunistically work with certain products for which there may be great potential but currently we lack sufficient information (e.g., mushrooms, snails). Because fish and herbs scored high on export potential in the *T-Account* analysis, we will consider working with these products. Sunflower oil looks like an exceptional product because the processing facility in Brcko has been privatized (with foreign investment) and because of the historical pre-war production of sunflower seeds. Finally, there are some products that have potential for broad-based impact that we will not actively promote but which we will support opportunistically—specifically, maize for animal feed is one product that has such potential.

4.0 Cross-Comparison of Findings

By cross-referencing the *T-Account* results with the findings of the other analytical methods described above and including findings from the EC Study, the ***most promising products***, by analysis, are shown in Table 7.

Table 7. Cross-Comparison of Results

Rank	Step 1: Volume/ Growth/Value	Step 2: Price-Point Analysis[1]	Step 3: Value-Chain Constraints Assessment[2]	Step 4: EC Study	Step 5: *T-Account*[3]
1	Pork/Products	Butter	Pork/Products	Dairy	**Pork/Products**
2	Vegetables	Yogurt	Cheese	Meat	**Butter**
3	Fruit	Pork	Processed Meats	Fish	**Yogurt**
4	Milk	Fruit jams	Cut flowers	Poultry	**Processed Meats**
5	Maize	Fruit juices	Seed potatoes	Vegetables	**Grapes/Wine**
6	Juices & Syrups	Honey	Honey		**Dairy/Milk**
7	Poultry/Broilers		Fish		**Cheese**

[1]More than 10% positively different from the imported prices.
[2]Products shown have the lowest intensity of constraints.
[3]Incorporates results from the Volume/Growth/Value analysis and the Value-Chain Constraints Assessment.

4.0 Cross-Comparison of Findings (continued)

This cross-comparison shows that across all methodologies, meat and dairy products have the highest potential. Of meat, pork has the greatest potential, although this applies mainly to the Republica Serbica. Dairy products show the next highest potential, with butter, yogurt, and cheese all figuring prominently. Sunflower oil has considerable potential. It is noteworthy that the EU study also suggested that oilseeds have promise, but at the time of the Study the Brcko processing facility had not been privatized. Vegetables and fruit/products clusters have potential, but this potential applies to specific products, such as berries for fruit. From our analysis, then, the most promising products are:

- **Pork/Products**
- **Butter**
- **Yogurt**
- **Grapes/Wine**
- **Processed Meats**
- **Dairy/Milk**
- **Cheese**

5.0 Conclusions

On the basis of these results, the LAMP Team has selected a short list of agricultural clusters for initial project activities. Each region (Banja Luka, Mostar, Sarajevo, and Tuzla) will focus on a mix of products most relevant to the processors and growers located there. For each region the target products are:

- ***Banja Luka***: Dairy, livestock and meat processing, poultry, fruit, vegetables, herbs, and fish.
- ***Mostar***: Dairy, fruit, vegetables, fish, and possibly wine.
- ***Sarajevo***: Livestock and meat processing, poultry, fruit, herbs, and animal feed.
- ***Tuzla***: Dairy, poultry, fruit, vegetables, herbs, and oilseeds.

The above offices may expand their cluster selections based on market dynamics. Additionally, the Team requests some flexibility to use its resources in support of select companies (e.g., Dzeno) that have demonstrated competitive success despite the overall non-competitiveness of the cluster (e.g., eggs).

ATTACHMENT 1

MARKET ANALYSIS
PRODUCT FACTOIDS

BASED ON THE ANALYSIS OF SECONDARY MARKET DATA

MARKET ANALYSIS KEY FINDINGS

The data for the analysis of secondary market information derive from the FAO's statistical database—FAOSTAT—unless otherwise indicated. The FAOSTAT data, in turn, come from the Statistic Office of FBiH. Data on the RS is not included in this data set because the RS Statistical Office has not provided information to BiH or FAO on the area under its jurisdiction. Consequently, the analysis *understates* product volume and probably does not accurately reflect overall growth. Data for years before 1996 are included in each "product factoid" when available. These data are included as indicative of market status before the war, but these earlier years are not included in growth or other calculations. Manipulated data are restricted exclusively to the post-war period: 1996 to the present. No attempt is made to forecast growth in this analysis, although annual average growth rates likely indicate future growth trends.

Data analysis shows production, production growth, imported quantities, import growth, market size (domestic production + imports), and market growth. Where significant, exports are also included. The standard deviation of production is taken as a reasonable proxy for market volatility. One observation is merited: in discussing the quality of data with an individual familiar with the statistical office, it was stated that the data are probably fairly accurate. Since tariffs have not been significant, traders have not had incentives to avoid detection and have tended to give accurate report of their economic activity. If this is true, the following analysis, while understating the RS, should at least reflect *magnitudes* with some degree of reliability.

Market Overall

- Best combination of growth/volume/value: berries, broilers, butter, ice cream, juices & syrup, milk, pork, sunoil, and yogurt.
- There are seven products with over 10% growth: butter, ice cream, juices & syrup, maize, milk, oats and sunoil; barley and pork have promising growth-to-volume ratios.
- Eliminate from consideration: wheat, nuts, and potatoes. As subsectors, fruit and vegetables are not very promising, although certain products within these subsectors (i.e., berries) may be. Beef and veal do not look promising, though further research into these products may indicate otherwise.

Cereal Cluster

It is informative to quickly assess key raw material sources:

- Oats have a surprising growth rate, with volumes between 80 to 90,000 MT. Oats have substantial import volatility, but from a small import base. Domestic production is also volatile. Several data outliers appear to misrepresent the product's overall potential.
- Barley is almost the same as oats, but without the statistical outliers. A promising profile—potential as an input into brewing?
- Maize—used for feed or human consumption? Where is the source of growth coming from? Why is there such serious market volatility?
- Wheat—production is half of domestic supply, must be a lot in storage. Serious amount of imports.

Fruit

- Imports equal domestic production. Berries and grapes (and perhaps melons?) are probably the best opportunities given their shorter investment horizons. Marked volatility.
- Some product data seem not to be available.

Meat

- Overall—fresh/chilled/frozen categories most likely are opportunities, given significant domestic growth potential to compete with imports. Production has been steady for all products.
- Pork—most promising meat subsector. Production levels unchanged since 1996 while consumption grows apace through imports.
- Mutton—some export potential.
- Beef—market volatility.

Oilseeds

- Sunflower is an unusual product. Sunflowers appear to be almost entirely re-exports. There is huge processing potential. Raw material has declined by over 20% in recent years, most likely due to the loss of local processing capacity. With renewed local processing could be major growth opportunity.

Poultry

- Eggs—opportunity in particular to compete in the liquid egg market segment.
- Broilers—import competing opportunity, though need to examine production and processing costs.

Special products

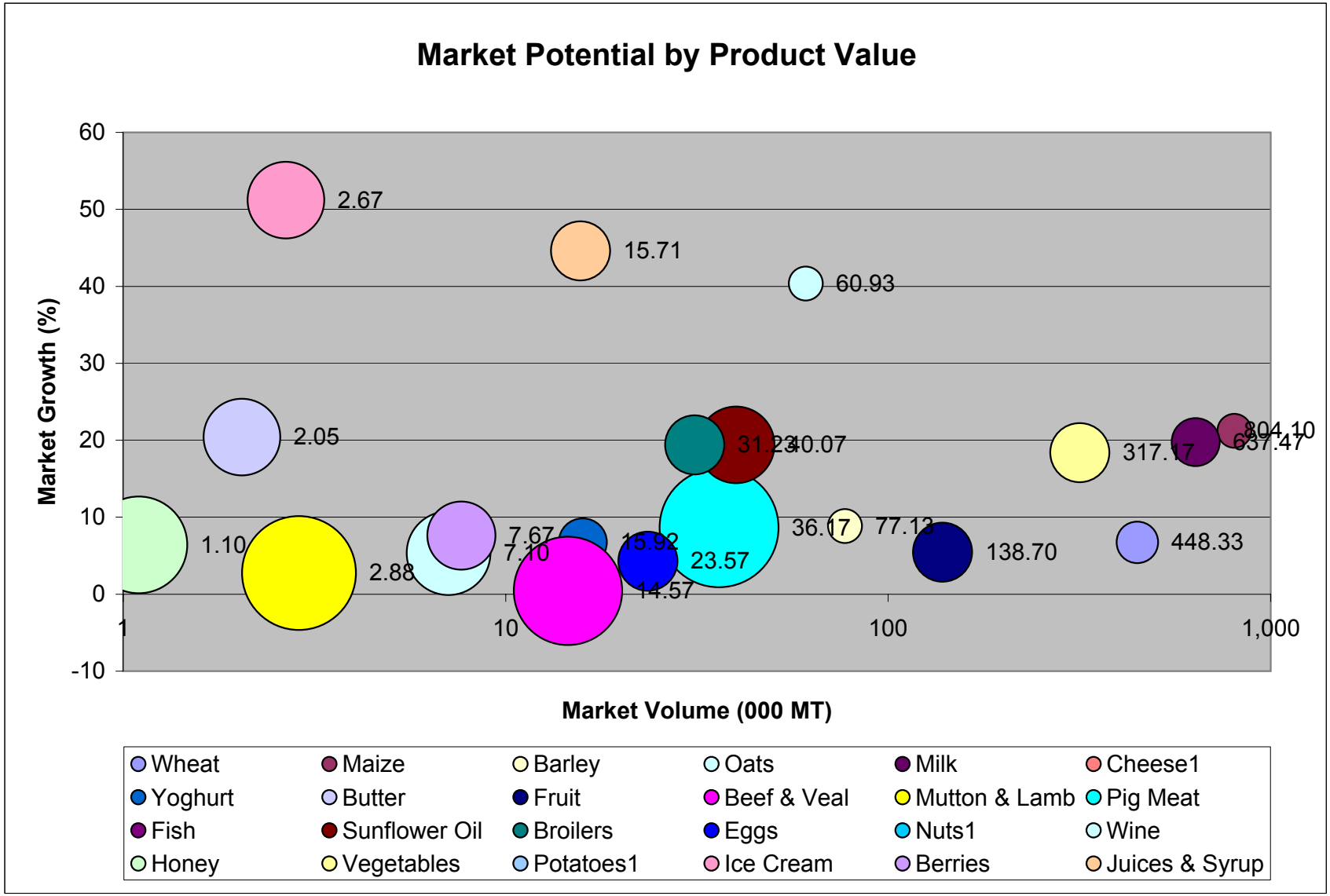
- Nuts—mostly walnuts—a non-starter due to declining growth and extreme volatility.
- Honey—combines decent growth with room to compete against imports. There is new demand in this market from herbal/nutrition industry buyers. Very high value per kilogram, but historically honey has performed poorly as a target of donor assistance.
- Wine—there is room to compete against growing imports. There also appears to be export (or re-export?) potential.

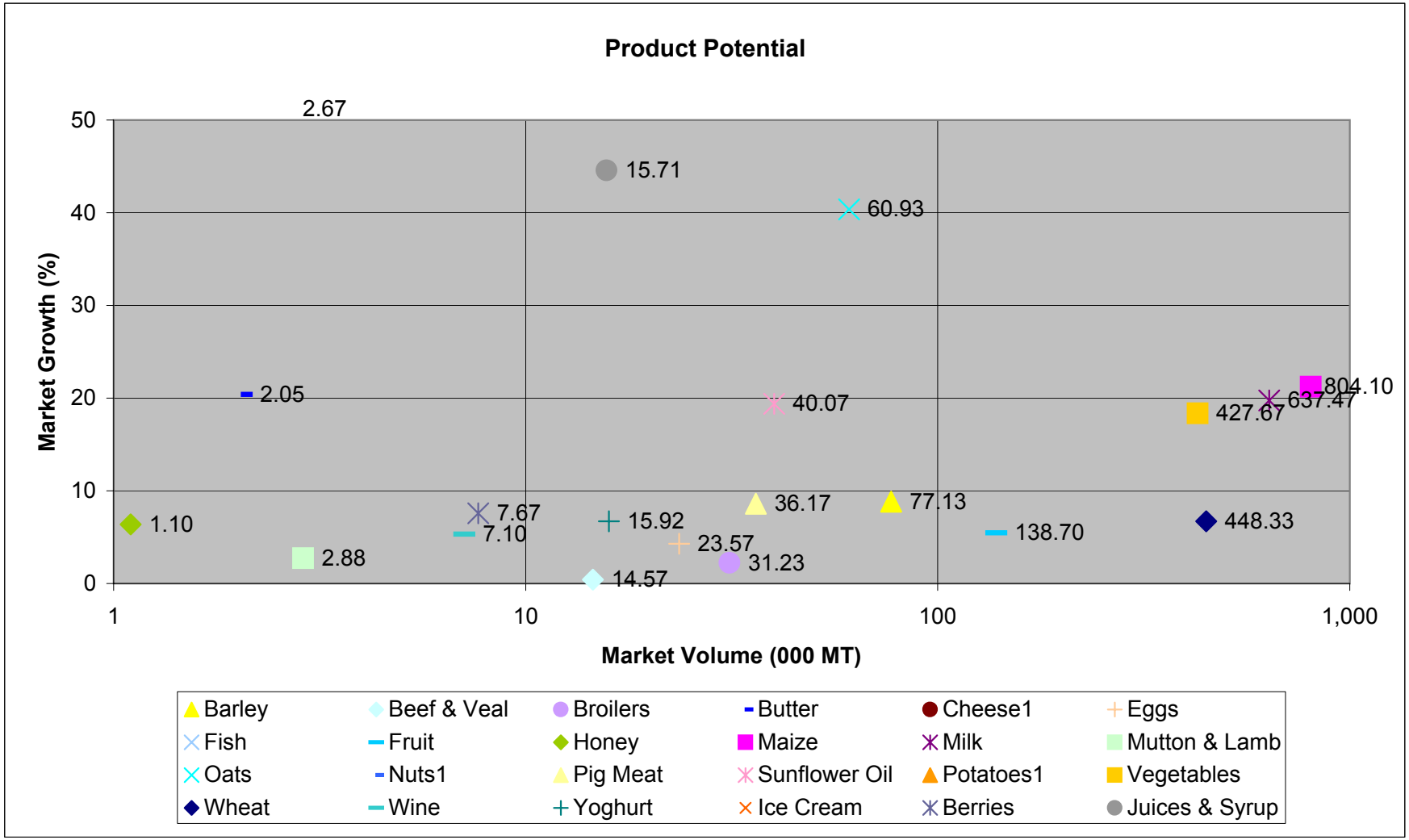
Vegetables

- Growth is declining for major products while imports remains steady.
- Market volatility is not excessive.
- Field potatoes are a non-starter; assistance would have to be predicated on a differentiation strategy and the introduction of new varieties to supply processors, which currently don't seem to exist.

Dairy

- Milk—high volume and high growth. Herd size steady at about 440,000 since 1998. Short-term solutions to some problems are possible, such as improving feed quality and timing. For several of the key dairy products, fat content could be an issue, which needs further research. Products such as butter and ice cream need milk with high-fat content, which may explain in part the unusually high import volumes for these products. Improving fat content can entail improved feed and feeding, but may also require the introduction of new breeds.
- Cheese—a declining market with growth going into reverse. There are a couple of specific types of cheese that seem to be doing well, at least anecdotally. These types include Travnik and Vlasicki. However, data are not available on such narrow categories of goods.
- Butter—very high potential to compete against imports.
- Yogurt—as butter, has high potential to compete against imports. There are also product differentiation opportunities, including blending with fruit, organic, whipping, etc.
- Ice cream—very high growth with very low volumes, but also very high value. A niche market opportunity.


Market Potential by Product Value
Market Growth (%)
60
50
40
30
20
10
0
-10
1
10
100
1,000
Market Volume (000 MT)
2.67
15.71
60.93
2.05
31.23
40.07
317.17
804.10
637.47
1.10
2.88
7.10
7.67
15.92
14.57
23.57
36.17
77.13
138.70
448.33
Wheat
Maize
Barley
Oats
Milk
Cheese1
Yoghurt
Butter
Fruit
Beef & Veal
Mutton & Lamb
Pig Meat
Fish
Sunflower Oil
Broilers
Eggs
Nuts1
Wine
Honey
Vegetables
Potatoes1
Ice Cream
Berries
Juices & Syrup



1 Negative numbers not included: cheese (-4.13%), nuts (-4.85%) and potatoes (-7.75%)

	Growth			Volume (3 yr avg)			Value
	Production	Imports	Market	Production	Imports	Market	Avg. Price
Wheat	8.32	43.28	6.71	288.57	201.77	448.33	1.50
Maize	21.70	174.78	21.22	656.37	147.73	804.10	1.00
Barley	6.37	174.78	8.83	58.00	19.13	77.13	1.00
Oats	17.66	611.82	40.35	54.70	6.23	60.93	1.00
Milk	6.05	3.66	19.74	543.70	93.77	637.47	2.00
Cheese[1]	-5.68	10.47		9.47	5.03	14.50	10.00
Yogurt	16.71	91.87	6.71	6.67	3.67	15.92	2.00
Butter	15.34	22.62	20.40	0.18	1.87	2.05	5.00
Ice Cream	244.85	63.23	51.19	0.50	2.33	2.67	5.00
Fruit	0.71	14.84	5.45	83.00	55.70	138.70	3.00
Berries	7.59		7.59	7.67		7.67	4.00
Juices & Syrup	117.72	-19.40	44.58	13.08	2.63	15.71	3.00
Beef & Veal	-2.04	80.50	0.42	12.63	1.93	14.57	10.00
Mutton & Lamb	0.55	120.00	2.72	2.70	0.08	2.88	11.00
Pig Meat	-12.15	21.41	8.60	11.17	8.70	36.17	12.00
Fish							15.00
Sunflower Oil	241.54	19.18	19.40	0.41	39.67	40.07	5.00
Broilers	-6.88	19.52	2.24	8.57	11.80	31.23	5.00
Eggs	19.31	-2.64	4.28	15.07	8.50	23.57	3.00
Nuts[1]	-1.54	359.76		2.67	0.16	2.83	3.00
Wine	85.58	18.70	5.32	5.20	1.90	7.10	6.00
Honey	10.65	-2.78	6.39	0.90	0.10	1.10	8.00
Vegetables	4.03	11.38	18.36	413.37	14.30	427.67	3.00
Potatoes[1]	-7.25	28.27		301.90	15.27	317.17	3.00

	BiH Market Share	
1	Vegetables	96%
2	Potatoes	95%
3	Mutton & Lamb	94%
3	Nuts	94%
4	Oats	90%
5	Beef & Veal	87%
6	Milk	85%
7	Juices & Syrup	83%
8	Honey	82%
8	Maize	82%
9	Barley	75%
10	Wine	73%
11	Cheese	65%
12	Eggs	64%
12	Wheat	64%
13	Fruit	60%
14	Yoghurt	42%
15	Pig Meat	31%
16	Broilers	27%
17	Ice Cream	19%
18	Butter	9%
19	Sunflower Oil	1%
	Berries	
	Fish	

Market share incl. consumption of own household production (e.g., milk and vegetables)

	Volume: Sextiles		
1	Maize	804.10	1
2	Milk	637.47	1
3	Wheat	448.33	1
4	Vegetables[1]	427.67	1
5	Potatoes	317.17	2
6	Fruit	138.70	2
7	Barley	77.13	2
8	Oats	60.93	2
9	Sunflower Oil	40.07	3
10	Pig Meat	36.17	3
11	Broilers	31.23	3
12	Eggs	23.57	3
13	Yoghurt	15.92	4
14	Juices & Syrup	15.71	4
15	Beef & Veal	14.57	4
16	Cheese[1]	14.50	4
17	Berries	7.67	5
18	Wine	7.10	5
19	Mutton & Lamb	2.88	5
20	Nuts[1]	2.83	5
21	Ice Cream	2.67	6
22	Butter	2.05	6
23	Honey	1.10	6
24	Fish		6

[1]Veg. not incl. potatoes

Product Factoid

Cereal

Product Factoid: CEREAL

(000 Metric Tons, unless otherwise indicated)

Product: Cereal	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Domestic Cereal Supply	1027.0	972.9	1090.9	903.8	1071.0	1552.7	1818.6	1568.6	1485.0	1417.4		-2.40	
Total BiH Production	962.3	847.4	671.4	841.4	1,242.1	1,326.7	1,368.8	935.2	903.9	1,338.5		-1.31	210.76
Average Annual Growth					47.6	6.8	3.2	-31.7	-3.3	48.1		11.78	
Total Imports	66.1	328.9	181.2	245.0	383.8	515.5	410.4	499.4	157.2			17.91	143.45
Average Annual Growth					56.7	34.3	-20.4	21.7	-68.5			4.75	
Imported Cereal Flour	0.1	0.2	0.3	0.1	0	0	6	0	0	0			2.49
Total Domestic Production + Imports	1028.4	1176.3	852.6	1086.4	1625.9	1842.2	1779.2	1434.6	1061.1	1338.5			294.21
Average Annual Market Growth					49.7	13.3	-3.4	-19.4	-26.0	26.1		6.71	

Product Factoid: WHEAT

(000 Metric Tons, unless otherwise indicated)

Product: Wheat	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	369.8	386.5	540.3	462.2	392.7	577.4	716.6	563.9	720.7	600.2		-5.85	
Total BiH Production	340.0	330.0	313.0	238.7	165.7	287.3	340.9	257.7	338.5	269.5	297.0	7.85	64.48
Average Annual Production Growth					-30.6	73.4	18.7	-24.4	31.4	-20.4	10.2	8.32	
Total Imports	1.6	0.5	14.6	36.0	66.0	154.0	210.0	165.3	298.0	142.0		9.35	77.23
Average Annual Import Growth					83.3	133.3	36.4	-21.3	80.3	-52.3		43.28	
Total Exports	4.4	0.2	1.0	4.9	9.9		0.7	2.2	0.0	1.0	0.4		4.07
Average Annual Export Growth					102.0	-100.0		214.3	-100.0		-60.0	11.27	
Total Domestic Production + Imports	341.6	330.5	327.6	274.7	231.7	441.3	550.9	423.0	636.5	411.5	297.0		137.77
Average Annual Market Growth					-15.7	90.5	24.8	-23.2	50.5	-35.3	-27.8	9.10	

Product Factoid: MAIZE

(000 Metric Tons, unless otherwise indicated)

Product: Maize	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total BiH Production	630.0	540.0	460.0	372.0	588.0	830.0	846.6	984.0	474.9	510.2	912.0	-6.19	208.85
Average Annual Production Growth					58.1	41.2	2.0	16.2	-51.7	7.4	78.8	21.7	
Total Imports	0.2	3.4	5.0	3.6	5.2	16.8	135.7	134.8	103.8	204.6		97.63	76.62
Average Annual Import Growth					44.4	223.1	707.7	-0.7	-23.0	97.1		174.8	
Total Domestic Production + Imports	630.2	543.4	465.0	375.6	593.2	846.8	982.3	1118.8	578.7	714.8	912.0		217.19
Average Annual Market Growth					57.9	42.8	16.0	13.9	-48.3	23.5	27.6	19.06	

Product Factoid: BARLEY

(000 Metric Tons, unless otherwise indicated)

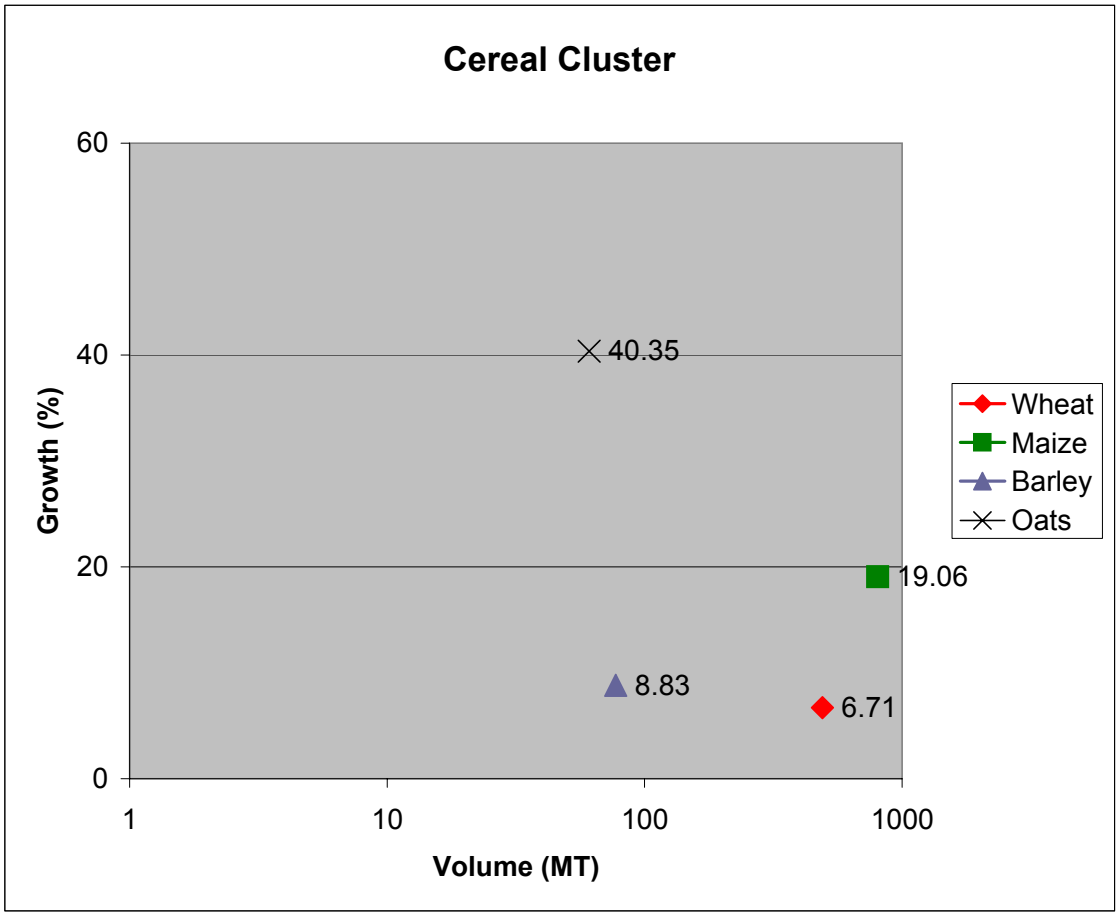
Product: Barley	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total BiH Production	58.0	51.0	44.2	42.0	47.0	58.0	63.4	56.3	53.1	64.6	61.5	3.50	6.56
Average Annual Production Growth					11.9	23.4	9.3	-11.2	-5.7	21.7	-4.8	6.4	
Total Imports	0.2	1.3	2.4	1.3	1.0	0.6	1.6	7.0	50.0	0.4		106.09	19.70
Average Annual Import Growth					-23.1	-40.0	166.7	337.5	614.3	-99.2		159.36	
Total Domestic Production + Imports	58.2	52.3	46.6	43.3	48.0	58.6	65.0	63.3	103.1	65.0	61.5		18.74
Average Annual Market Growth					10.9	22.1	10.9	-2.6	62.9	-37.0	-5.4	8.83	

Product Factoid: OATS

(000 Metric Tons, unless otherwise indicated)

Product: Oats	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total BiH Production	44.0	33.0	22.1	11.2	36.1	58.8	66.2	61.6	56.9	45.6	55.0	2.91	11.21
Average Annual Growth		-25.0	-33.0	-49.3	222.3	62.9	12.6	-6.9	-7.6	-19.9	20.6	17.66	92.18
Total Imports	0.3	0.5	0.7	0.4	0.7	0.2	0.1	3.6	15.0	0.1		77.07	5.90
Average Annual Import Growth					75.0	-71.4	-50.0	3500.0	316.7	-99.3		611.82	
Total Domestic Production + Imports	44.3	33.5	22.8	11.6	36.8	59.0	66.3	65.2	71.9	45.7	55.0		13.52
Average Annual Market Growth					217.2	60.3	12.4	-1.7	10.3	-36.4	20.4	40.35	

	Growth			Volume (3 yr avg)		
	Productic	Imports	Market	Productic	Imports	Market
Wheat	7.85	9.35	6.71	288.57	201.77	490.33
Maize	-6.19	97.63	19.06	656.37	147.73	804.10
Barley	3.50	106.09	8.83	58.00	19.13	77.13
Oats	2.91	77.07	40.35	54.70	6.23	60.93


Cereal Cluster
60
40
20
0
Growth (%)
40.35
19.06
8.83
6.71
1
10
100
1000
Volume (MT)
Wheat
Maize
Barley
Oats

Product Factoid

Dairy

Product Factoid: MILK

(000 Metric Tons, unless otherwise indicated)

Product: Milk (excl. butter)	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	466.0	436.0	340.2	373.0	425.1	487.8	544.4	606.6	589.0	586.0		6.73	
Total BiH Production	460.1	411.0	308.9	319.9	392.4	436.1	254.6	577.0	547.1	507.0	467.0	6.05	118.71
Average Annual Production Growth					22.7	11.1	-41.6	126.6	-5.2	-7.3	-7.9	14.06	
Total Imports					81.2	102.3	73.2	82.9	81.6	116.8		3.66	16.43
Average Annual Imports Growth						26.0	-28.4	13.3	-1.6	43.1		10.47	
Total Exports	1.0	0.6			2.8	2.6	1.0	4.0	2.0	0.6		-22.15	1.25
Average Annual Export Growth						-7.1	-61.5	300.0	-50.0	-70.0		22.26	
Total Domestic Production + Imports	460.1	411.0	308.9	319.9	473.6	538.4	327.8	659.9	628.7	623.8			125.44
Average Annual Market Growth					48.0	13.7	-39.1	101.3	-4.7	-0.8		19.74	

Product Factoid: CHEESE

(000 Metric Tons, unless otherwise indicated)

Product: Cheese	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	18.4	17.5	15.2	16.3	18.0	18.6	18.6	16.6	14.6	14.3		-5.53	
Total BiH Production	17.9	16.0	13.5	13.5	13.5	13.5	14.0	11.0	8.7	8.7	8.6	-10.18	2.46
Average Annual Production Growth					0.0	0.0	3.7	-21.4	-20.9	0.0	-1.1	-5.68	
Total Imports	0.5	1.5	1.7	2.8	4.5	5.1	4.6	5.6	5.9	3.6		5.06	0.83
Average Annual Imports Growth					60.7	13.3	-9.8	21.7	5.4	-39.0		8.73	
Total Domestic Production + Imports	18.4	17.5	15.2	16.3	18.0	18.6	18.6	16.6	14.6	12.3			2.54
Average Annual Market Growth					10.4	3.3	0.0	-10.8	-12.0	-15.8		-4.13	

Product Factoid: YOGHURT

(000 Metric Tons, unless otherwise indicated)

Product: Yoghurt	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Consumption													
Total BiH Production	3.0	1.4	1.2	3.0	3.7	4.2	4.8	6.2	6.3	7.5	8.7		1.45
Average Annual Production Growth					23.3	13.5	14.3	29.2	1.6	19.0	16.0	16.71	
Total Imports	0.0	0.0	0.1	0.8	5.2	5.7	2.5	3.4	3.8	3.8			1.18
Average Annual Imports Growth					550.0	9.6	-56.1	36.0	11.8	0.0		91.87	
Total Domestic Production + Imports	3.0	1.4	1.3	3.8	8.9	9.9	7.3	9.6	10.1	11.3			1.34
						11.2	-26.3	31.5	5.2	11.9		6.71	

Product Factoid: BUTTER

(000 Metric Tons, unless otherwise indicated)

Product: Butter	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	0.2	0.4	0.4	0.6	1.3	1.9	1.8	2.2	2.4	3.0		15.79	0.58
Total BiH Production	0.1	0.1	0.1	0.1	0.07	0.09	0.14	0.16	0.18	0.20	0.20	22.64	0.05
Average Annual Production Growth					-30.0	28.6	55.6	14.3	12.5	11.1		15.34	
Total Imports	0.1	0.3	0.3	0.6	1.2	1.8	1.7	2.0	2.2	1.4		15.36	0.37
Average Annual Import Growth					100.0	50.0	-5.6	17.6	10.0	-36.4		22.62	
Total Domestic Production + Imports	0.2	0.4	0.4	0.7	1.3	1.9	1.8	2.2	2.4	1.6	0.2		0.39
Average Annual Market Growth					81.4	48.8	-2.6	17.4	10.2	-32.8		20.40	

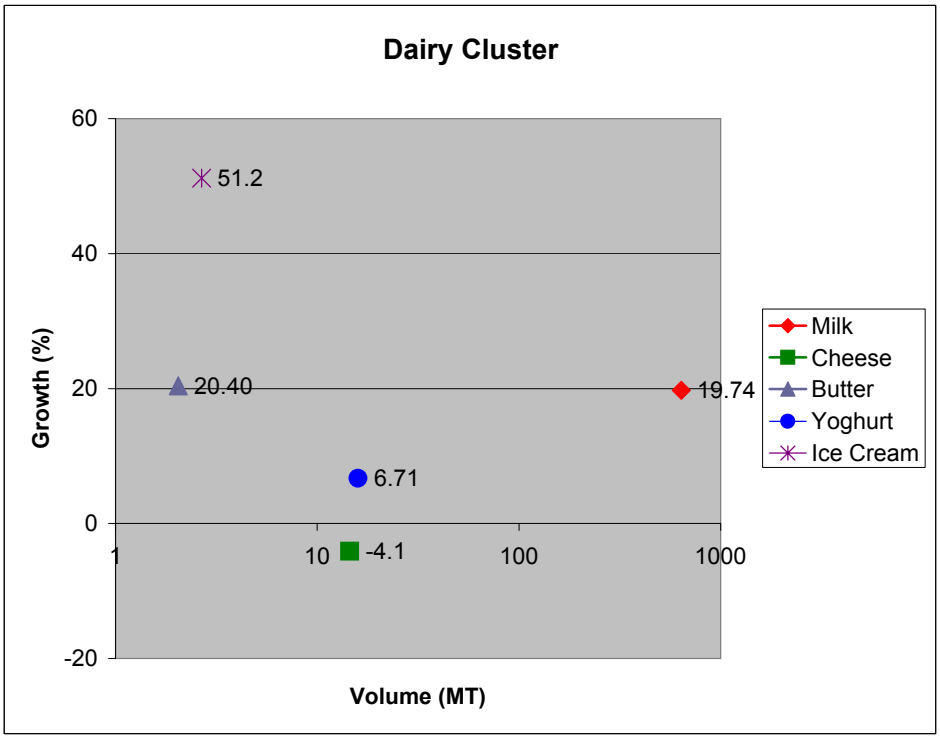
Product Factoid: ICE CREAM & EDIBLE ICE

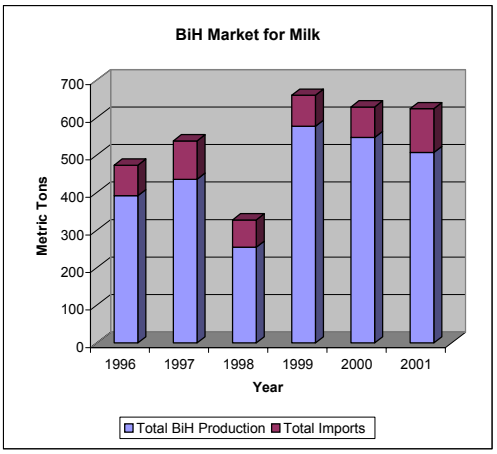
(000 Metric Tons, unless otherwise indicated)

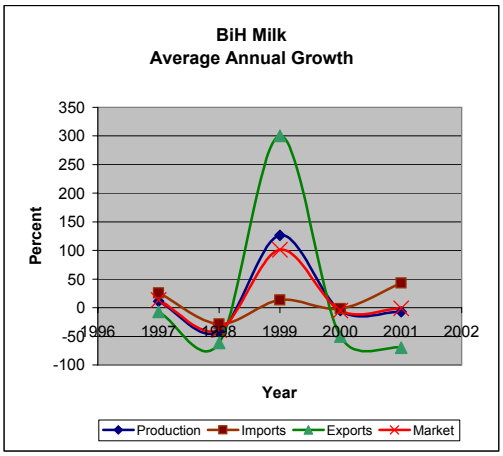
Product: Ice Cream	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Consumption													
Total BiH Production			0.0	0.0	0.1	0.1	0.9	0.8	0.2		1.0		
Average Annual Production Growth				-50.0	900.0	0.0	750.0	-5.9	-75.0	-100.0		244.9	
Total Imports	0.1	0.3	0.3	0.4	1	2	0.9	1	3	3			
Average Annual Import Growth		200.0	0.0	33.3	225.0	53.8	-55.0	55.6	100.0	0.0		63.2	
Total Domestic Production + Imports			0.3	0.4	1.4	2.1	1.8	2.2	3.0	2.8	1.0		
Average Annual Market Growth				28.1	241.5	50.0	-16.7	25.7	36.4	-6.7		51.2	

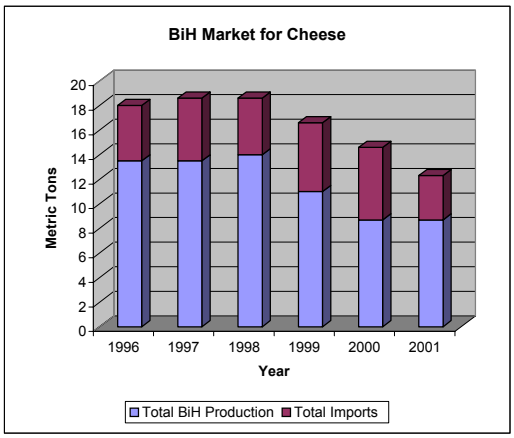
Metric Tons

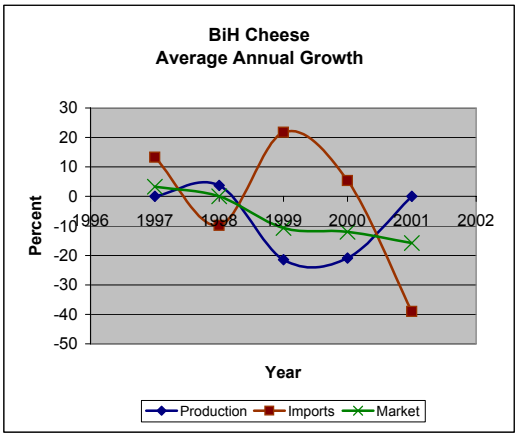
	Growth			Volume (3 yr avg)		
	Production	Imports	Market	Production	Imports	Market
Milk	6.05	3.66	19.74	543.7	93.8	637.5
Cheese	-10.18	5.06	-4.1	9.5	5.0	14.5
Yoghurt	16.71	91.87	6.71	6.7	3.7	15.9
Butter	22.64	15.36	20.40	0.18	1.9	2.0
Ice Crear	244.9	63.2	51.2	0.50	2.3	2.7

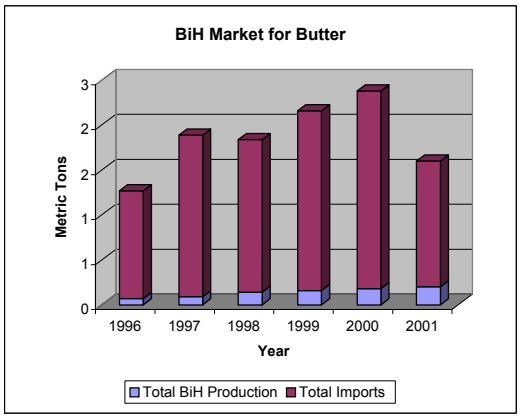

Dairy Cluster
60
40
20
0
-20
Growth (%)
51.2
20.40
19.74
6.71
-4.1
1
10
100
1000
Volume (MT)
Milk
Cheese
Butter
Yoghurt
Ice Cream

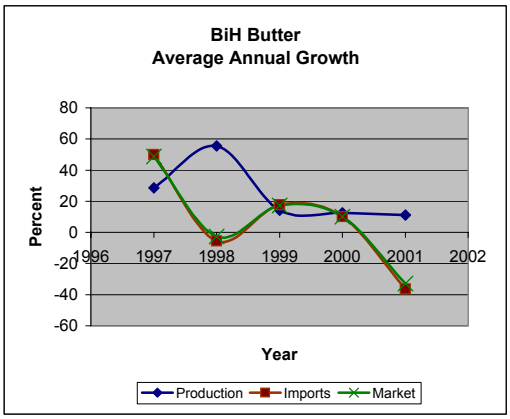

BiH Market for Milk
700
600
500
400
300
200
100
0
Metric Tons
1996
1997
1998
1999
2000
2001
Year
Total BiH Production
Total Imports

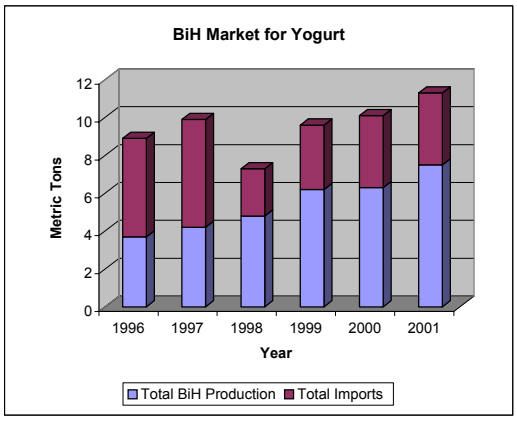

BiH Milk
Average Annual Growth
350
300
250
200
150
100
50
0
-50
-100
Percent
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Exports
Market


BiH Market for Cheese
Metric Tons
0
2
4
6
8
10
12
14
16
18
20
1996
1997
1998
1999
2000
2001
Year
Total BiH Production
Total Imports


BiH Cheese
Average Annual Growth
Percent
30
20
10
0
-10
-20
-30
-40
-50
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market


BiH Market for Butter
Metric Tons
0
1
1
2
2
3
1996
1997
1998
1999
2000
2001
Year
Total BiH Production
Total Imports


BiH Butter
Average Annual Growth
Percent
80
60
40
20
0
-20
-40
-60
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market


BiH Market for Yogurt
Metric Tons
0
2
4
6
8
10
12
1996
1997
1998
1999
2000
2001
Year
Total BiH Production
Total Imports

Product Factoid

Fruit

Product Factoid: FRUIT

(000 Metric Tons, unless otherwise indicated)

Product: Fruit	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	94.9	97.8	87.6	99.3	111.4	132.3	120.4	94.2	108.3	123.4		-0.96	13.34
Total BiH Production	163.8	115.7	86.9	87.8	100.1	124.1	125.2	85.0	80.6	83.4	83.3	-7.14	20.46
Average Annual Production Growth					14.0	24.0	0.9	-32.1	-5.2	3.5	-0.1	0.71	
Total Imports (excl. wine)	7.1	24	22.6	35.5	46	49.4	44.7	38.3	56.2	72.6		7.13	12.02
Average Annual Import Growth					29.6	7.4	-9.5	-14.3	46.7	29.2		14.84	
Total Exports (excl. wine)	25.9	7.2	0.5	0.6	5.6	5.8	14.0	5.6	6.3	9.5		5.79	3.38
Average Annual Export Growth					833.3	3.6	141.4	-60.0	12.5	50.8		163.60	
Total Domestic Production + Imports	170.9	139.7	109.5	123.3	146.1	173.5	169.9	123.3	136.8	156.0		144.90	19.40
Average Annual Market Growth					18.5	18.8	-2.1	-27.4	10.9	14.0		5.45	17.82

Product Factoid: APPLES

(000 Metric Tons, unless otherwise indicated)

Product: Apples	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	13.6	19.7	21.7	25.6	27.0	34.9	24.4	21.7	22.2	35.7		-1	6.22
Total BiH Production	27.2	20.0	17.0	17.5	17.9	25.4	25.0	16.0	14.4	14.4	14.5	-8.84	5.09
Average Annual Production Growth					2.3	41.9	-1.6	-36.0	-10.0	0.0	0.7	-0.39	
Total Imports	0.2	1.8	4.7	8.1	9.5	9.6	9.3	9.2	11.7	7.0		13.77	1.49
Average Annual Import Growth					17.3	1.1	-3.1	-1.1	27.2	-40.2		0.19	
Total Exports		0.1	0.0	0.0	3.0	0.1	11.4	4.3	4.9	4.5		41	3.72
Total Domestic Production + Imports	27.4	21.8	21.7	25.6	27.4	35.0	34.3	25.2	26.1	21.4			5.36
Average Annual Market Growth					7.0	27.7	-2.0	-26.5	3.6	-18.0		-1.37	

Product Factoid: PEARS

(000 Metric Tons, unless otherwise indicated)

Product: Pears	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply													
Total BiH Production	8.0	5.0	5.0	5.8	6.0	8.0	10.0	10.6	9.0	8.0	8.1		1.65
Average Annual Production Growth					3.4	33.3	25.0	6.0	-15.1	-11.1	1.3	6.12	
Total Imports	0.0	0.1	0.2	0.7	0.9	1.3	0.6	0.7	0.9	1.1			0.26
Average Annual Import Growth					28.6	44.4	-53.8	16.7	28.6	22.2		14.44	
Total Exports	0.0	0.1	0.0	0.1	0.1	0.7	0.0	0.0	0.1				0.29
Total Domestic Production + Imports	8.0	5.1	5.2	6.5	6.9	9.3	10.6	11.3	9.9	9.1			1.52
Average Annual Market Growth					6.2	34.8	14.0	6.6	-12.4	-8.1		6.84	

Product Factoid: PLUMS

(000 Metric Tons, unless otherwise indicated)

Product: Plums	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply													#DIV/0!
Total BiH Production	64.5	50.0	35.0	42.0	55.0	63.0	58.6	27.0	26.8	26.8	27.0		17.71
Average Annual Production Growth					31.0	14.5	-7.0	-53.9	-0.7	0.0	0.7	-2.20	
Total Imports								0.1	0.1	0.1			0.00
Average Annual Import Growth									0.0	0.0		0.00	
Total Exports	0.1	0.0		0.0	1.3	0.8	0.6	1.0	1.0	1.0			0.23
Average Annual Export Growth						-38.5	-25.0	66.7	0.0	0.0		0.64	
Total Domestic Production + Imports	64.5	50.0	35.0	42.0	55.0	63.0	58.6	27.1	26.9	26.9	27.0		17.66
Average Annual Market Growth					31.0	14.5	-7.0	-53.8	-0.7	0.0	0.4	-2.23	

Product Factoid: CHERRIES

(000 Metric Tons, unless otherwise indicated)

Product: Cherries	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply													#DIV/0!
Total BiH Production	8.8	6.0	5.0	2.3	2.2	4.0	7.4	6.1	4.6	4.7	4.7		1.78
Average Annual Production Growth					-4.3	81.8	85.0	-17.6	-24.6	2.2	0.0	17.50	49.71
Total Imports													#DIV/0!
Average Annual Import Growth		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Total Domestic Production + Imports	8.8	6.0	5.0	2.3	2.2	4.0	7.4	6.1	4.6	4.7	4.7		1.78
Average Annual Market Growth					-4.3	81.8	85.0	-17.6	-24.6	2.2	0.0	17.50	

Product Factoid

Product Factoid: JUICES & SYRUP

(000 Metric Tons, unless otherwise indicated)

Product: Juices & Syrup	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply													#DIV/0!
Fruit Juice (Mediterranean fruit)	0.3	0.7	0.5		0.1	0.4	0.4	0.2	0.3	0.3	0.6		
Fruit juice (Continental fruit)	0.4	3.5	3.3		0.2	0.3	1.8	2.9	6.9	10.6	16.0		
Fruit syrup	0.7	0.7	1.1	0.6	2.4	1.8	1.3	0.3	7.3	10.4	20.9		
Total BiH Production	1.4	4.9	4.9	0.6	2.7	2.5	3.5	3.4	14.5	21.3	37.5		8.00
Average Annual Production Growth					343.3	-6.0	38.0	-1.4	327.4	46.6	76.2	117.72	
Total Imports					3.4	4.3	2.6	3.1	2.4	2.4			0.74
Average Annual Import Growth						26.5	-39.5	19.2	-22.6	0.0	-100.0	-19.40	
Total Domestic Production + Imports	1.4	4.9	4.9	0.6	6.1	6.8	6.1	6.5	16.9	23.7	37.5		7.53
Average Annual Market Growth						12.2	-11.0	7.4	160.5	40.0	58.4	44.58	

Product Factoid: APRICOTS

(000 Metric Tons, unless otherwise indicated)

Product: Apricots	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply													#DIV/0!
Total BiH Production	0.0	0.4	0.4	0.4	0.4	0.4	0.5	1.8	0.5	0.5	0.5		0.55
Average Annual Production Growth					0.0	0.0	25.0	260.0	-72.2	0.0	0.0	30.40	
Total Imports													#DIV/0!
Average Annual Import Growth													
Total Domestic Production + Imports	0.0	0.4	0.4	0.4	0.4	0.4	0.5	1.8	0.5	0.5	0.5		0.55
Average Annual Market Growth					0.0	0.0	25.0	260.0	-72.2	0.0	0.0	30.40	

Product Factoid: PEACHES & NECTARINES

(000 Metric Tons, unless otherwise indicated)

Product: Peaches & Nectarines	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply													#DIV/0!
Total BiH Production	3.0	2.0	2.0	1.8	1.5	1.2	2.0	3.0	3.6	3.6	3.5		1.06
Average Annual Production Growth					-16.7	-20.0	66.7	50.0	20.0	0.0	-2.8	13.89	
Total Imports	0.0	0.0	0.2	0.3	0.7	1.1	0.6	1.2	1.7	2.7			0.78
Average Annual Import Growth					133.3	57.1	-45.5	100.0	41.7	58.8		57.59	
Total Domestic Production + Imports	3.0	2.0	2.2	2.1	2.2	2.3	2.6	4.2	5.3	6.3			1.73
Average Annual Market Growth					4.8	4.5	13.0	61.5	26.2	18.9		21.49	

Product Factoid: GRAPES

(000 Metric Tons, unless otherwise indicated)

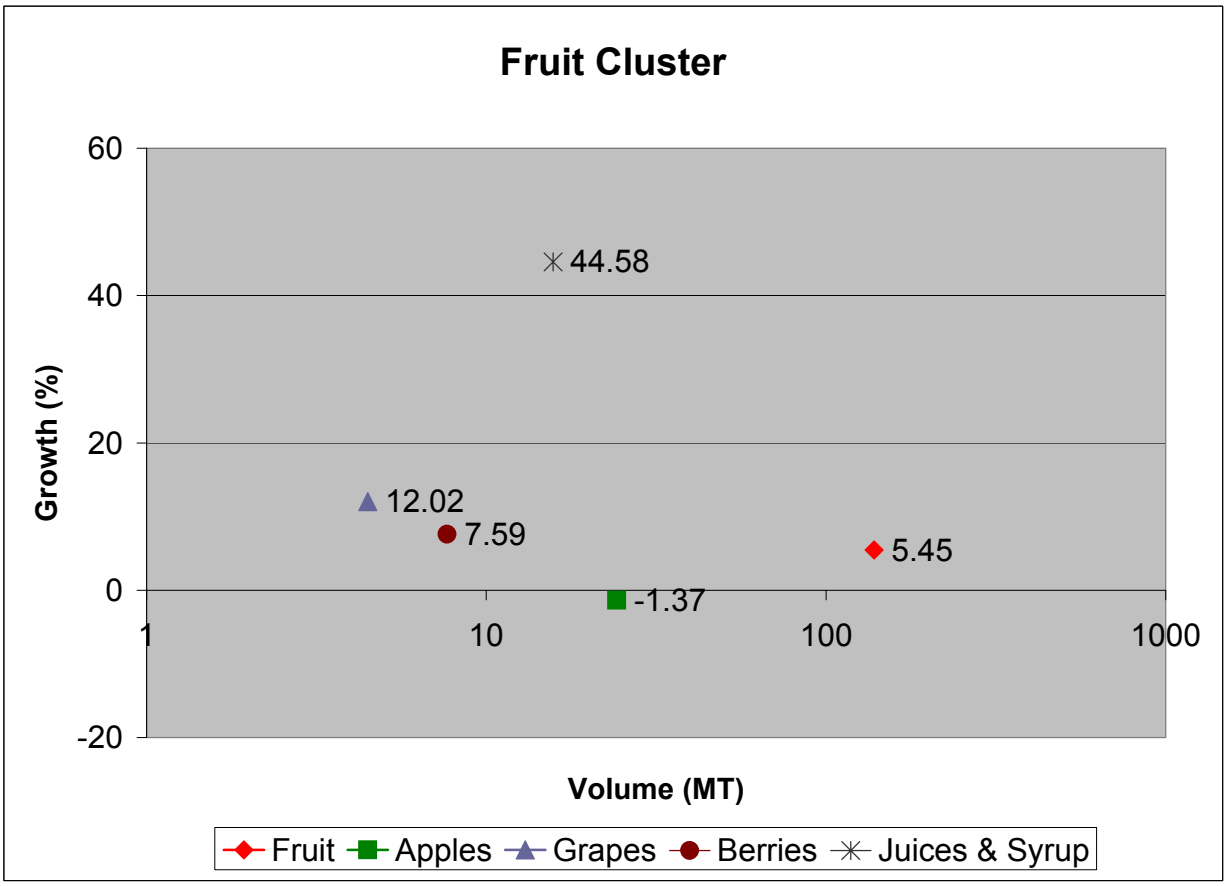
Product: Grapes	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	30.7	18.1	12.3	9.2	10.2	14.0	15.4	15.8	16.8	18.0		27.05	2.72
Total BiH Production	30.7	18.0	12.0	8.5	8.0	12.5	12.8	12.7	13.2	13.3	13.4	8.05	2.02
Average Annual Production Growth					-5.9	56.3	2.4	-0.8	3.9	0.8	0.8	8.20	
Total Imports	0.0	0.0	0.2	0.6	1.8	1.3	2.4	2.4	2.7	4.0		20.55	0.92
Imports Raisins	0.01	0.03	0.04	0.04	0.1	0.05	0.05	0.17	0.22	0.17			0.07
Average Annual Import Growth					200.0	-27.8	84.6	0.0	12.5	48.1		52.91	
Total Domestic Production + Imports	30.7	18.0	12.2	9.1	9.8	13.8	15.2	15.1	15.9	17.3			2.58
Average Annual Market Growth					7.7	40.8	10.1	-0.7	5.3	8.8		12.02	

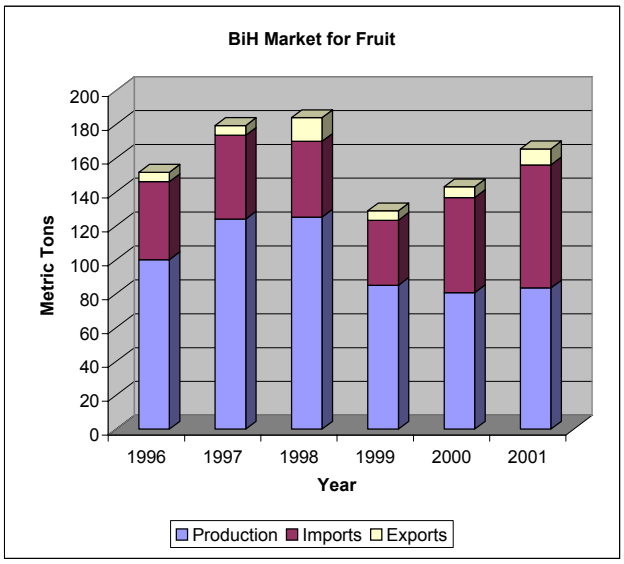
Product Factoid: BERRIES

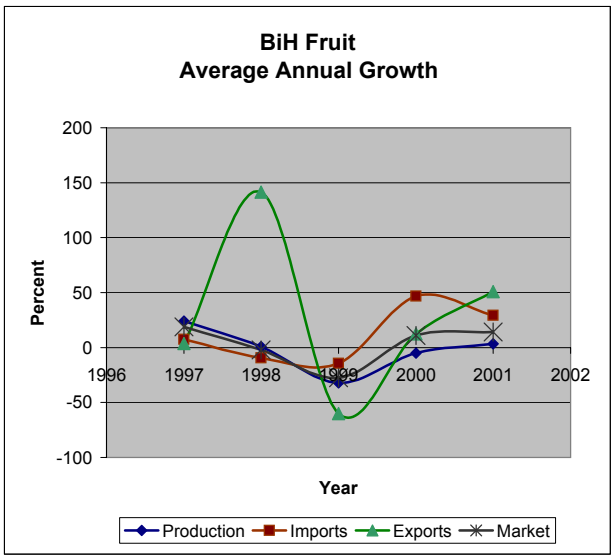
(000 Metric Tons, unless otherwise indicated)

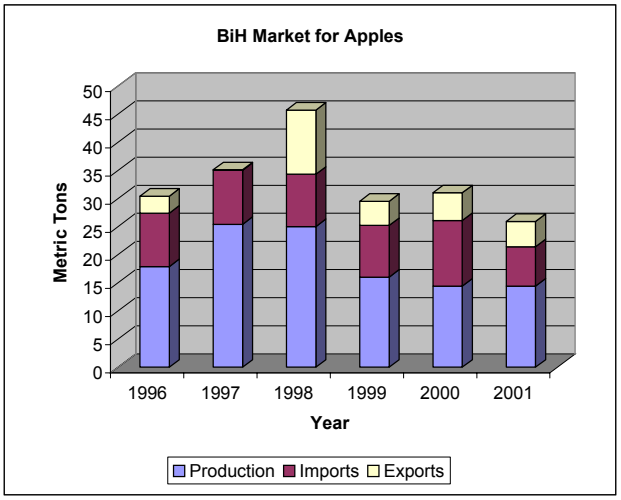
Product: Berries	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply													#DIV/0!
Raspberries					2	2	1	1	2	3	3		
Strawberries					5	5	5	5	5	7	7		
Total BiH Production					7	7	6	6	7	10	10	7.59	1.68
Average Annual Production Growth						-8.3	-9.1	-3.3	17.2	52.9	-1.0	8.08	
Total Imports													NA
Total Domestic Production + Imports													NA

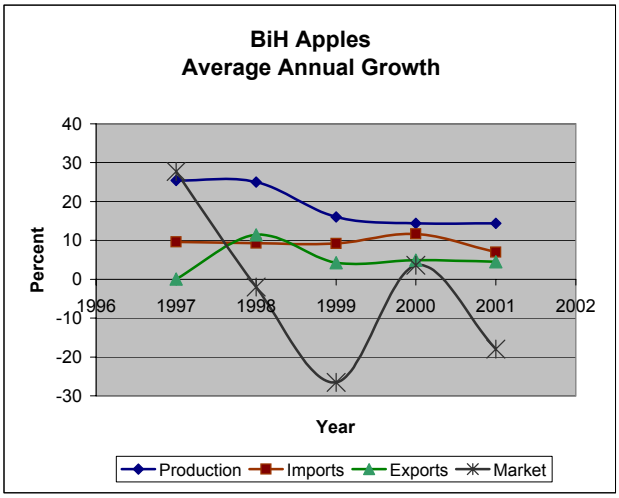
	Growth			Volume (3 yr avg)		
	Productic	Imports	Market	Productic	Imports	Market
Fruit	83.30	7.13	5.45	83.00	55.70	138.70
Apples	-8.84	13.77	-1.37	14.93	9.30	24.23
Grapes	8.05	20.55	12.02	13.07	3.03	4.48
Berries	7.59		7.59	7.67		7.67
Juices	117.72	-19.40	44.58	13.08	2.63	15.71

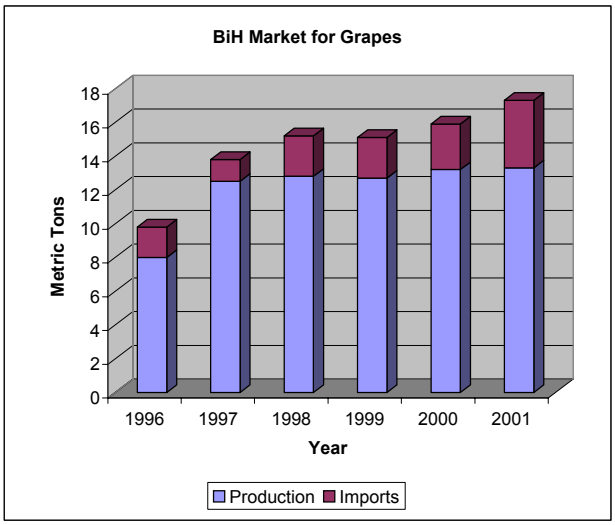

Fruit Cluster
60
40
20
0
-20
Growth (%)
44.58
12.02
7.59
5.45
-1.37
1
10
100
1000
Volume (MT)
Fruit
Apples
Grapes
Berries
Juices & Syrup

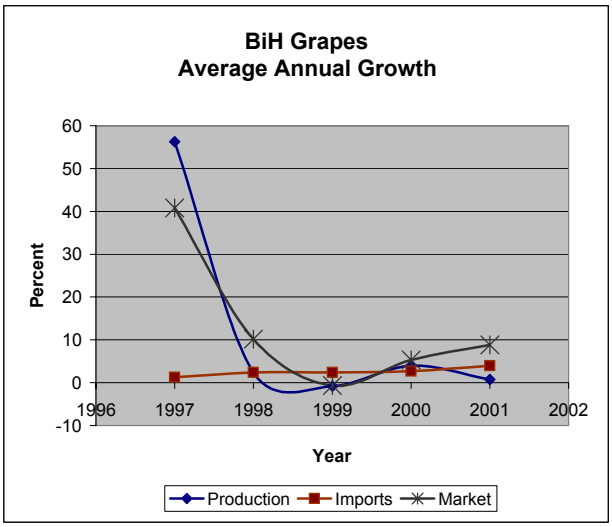

BiH Market for Fruit
200
180
160
140
120
100
80
60
40
20
0
Metric Tons
1996
1997
1998
1999
2000
2001
Year
Production
Imports
Exports


BiH Fruit
Average Annual Growth
200
150
100
50
0
-50
-100
Percent
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Exports
Market


BiH Market for Apples
Metric Tons
50
45
40
35
30
25
20
15
10
5
0
1996
1997
1998
1999
2000
2001
Year
Production
Imports
Exports


BiH Apples
Average Annual Growth
Percent
40
30
20
10
0
-10
-20
-30
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Exports
Market


BiH Market for Grapes
Metric Tons
18
16
14
12
10
8
6
4
2
0
1996
1997
1998
1999
2000
2001
Year
Production
Imports


BiH Grapes
Average Annual Growth
Percent
60
50
40
30
20
10
0
-10
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market

Product Factoid

Product Factoid: MEAT

(000 Metric Tons, unless otherwise indicated)

Product: Meat	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	74.8	72.6	76.2	80.6	98.8	93.6	90.6	73.5	65.0	84.2			12.85
Total BiH	66.3	62.6	53.8	50.3	38.3	31.9	35.6	35.7	34.4	35.1	29.7	-2.12	2.08
Average Annual Production Growth					-23.9	-16.7	11.6	0.3	-3.6	2.0		-5.05	
Imports (Fresh/Chilled/Frozen)	7	6	9	14	30	30	31	22	20	27			4.59
Imports (Sausages)	0.4	1.2	2.4	4.0	10.0	11.6	12.0	7.4	5.2	5.0			3.11
Total Imports	7.0	6.9	11.6	17.5	39.8	41.8	42.5	29.8	24.8	32.1			7.28
Average Annual Import Growth					127.4	5.0	1.7	-29.9	-16.8	29.4		19.48	
Total Domestic Production + Imports	73.3	69.5	65.4	67.8	78.1	73.7	78.1	65.5	59.2	67.2			7.60
Average Annual Market Growth					15.2	-5.6	6.0	-16.1	-9.6	13.5		0.55	

Product Factoid: CATTLE

(000 Metric Tons, unless otherwise indicated)

Product: Beef & Veal	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Stocks (head)	665.0	665.0	570.0	518.7	390.2	411.8	425.7	442.5	461.9	440.0	440.0		25.29
Average Annual Growth					-24.8	5.5	3.4	3.9	4.4	-4.7		-2.05	
Total BiH Production	30.0	30.0	23.0	15.9	13.0	9.9	12.3	12.4	12.5	13.0	13.0		1.16
Average Annual Production Growth					-18.2	-23.8	24.2	0.8	0.8	4.0		-2.04	
Total Imports (Head)		1.8	3.5	14.9	160.2	39.5	39.7	32.0	101.6	25.0			53.61
Average Annual Import Growth					975.2	-75.3	0.5	-19.4	217.5	-75.4		170.51	
Total Imports (meat)	0.3	1.4	0.9	1.0	3.7	2.4	0.5	1.3	1.2	3.3		-4.73	1.27
Average Annual Import Growth					270.0	-35.1	-79.2	160.0	-7.7	175.0		80.50	
Total Domestic Production + Imports	30.3	31.4	23.9	16.9	16.7	12.3	12.8	13.7	13.7	16.3			1.83
Average Annual Market Growth					-1.2	-26.3	4.1	7.0	0.0	19.0		0.42	

Product Factoid: SHEEP

(000 Metric Tons, unless otherwise indicated)

Product: Mutton & Lamb	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	4.0	3.2	2.5	2.7	3.0	2.8	2.6	2.7	2.8	3.0	0.7		0.16
Average Annual Growth					11.1	-6.7	-7.1	3.8	3.7	7.1	-76.7	-9.24	
Total BiH	4.0	3.0	2.4	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7		0.00
Average Annual Production Growth					3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.55	
Total Imports (meat)	0.1	0.2	0.1	0.2	0.3	0.1	0.0	0.2	0.1	0.3		4.05	0.11
Average Annual Import Growth					50.0	-66.7	-80.0	650.0	-33.3	200.0		120.00	
Total Exports (meat)					0.02	0.03	0.14	0.15	0.05	0.05		21.11	0.06
Average Annual Export Growth						50.0	366.7	7.1	-66.7	0.0		71.43	
Total Domestic Production + Imports	4.1	3.2	2.5	2.8	3.0	2.8	2.7	2.9	2.8	3.0			0.11
Average Annual Market Growth					7.1	-6.7	-2.9	4.8	-1.8	7.1		1.30	

Product Factoid: PIGS

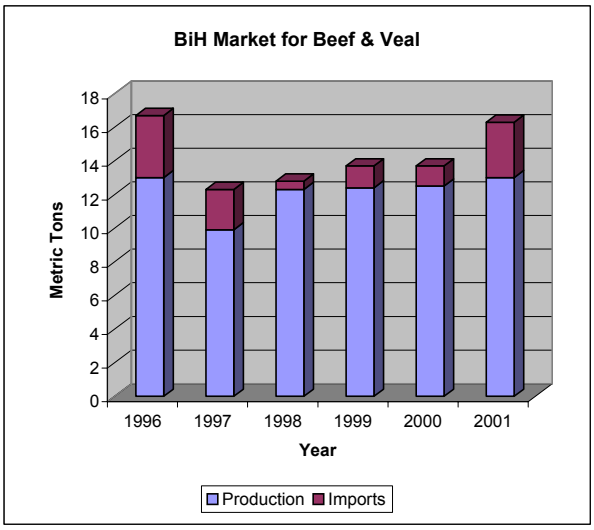
(000 Metric Tons, unless otherwise indicated)

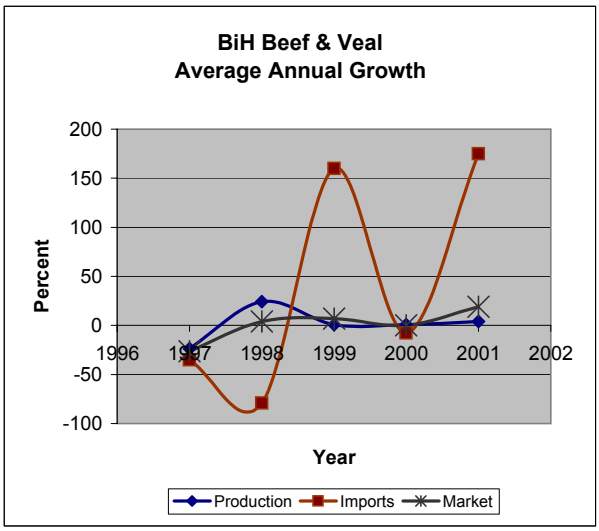
Product: Pork	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	20.2	18.2	20.4	24.4	30.1	32.7	34.9	26.8	22.9	32.7			4.46
Average Annual Growth					23.4	8.6	6.7	-23.2	-14.6	42.8		7.29	
Total BiH	14.3	14.5	15.0	17.0	11.4	11.0	11.6	11.7	10.8	11.0	5.6		0.37
Average Annual Production Growth					-32.9	-3.5	5.5	0.9	-7.7	1.9	-49.1	-12.15	
Total Imports (meat)	5.6	2.8	3.5	4.5	11.4	13.8	15.1	9.8	8.4	7.9		-10.22	2.92
Average Annual Import Growth					153.3	21.1	9.4	-35.1	-14.3	-6.0		21.41	
Total Domestic Production + Imports	25.8	21.0	23.9	28.9	41.5	46.5	50.0	36.6	31.3	40.6			6.71
Average Annual Market Growth					43.6	12.0	7.5	-26.8	-14.5	29.7		8.60	

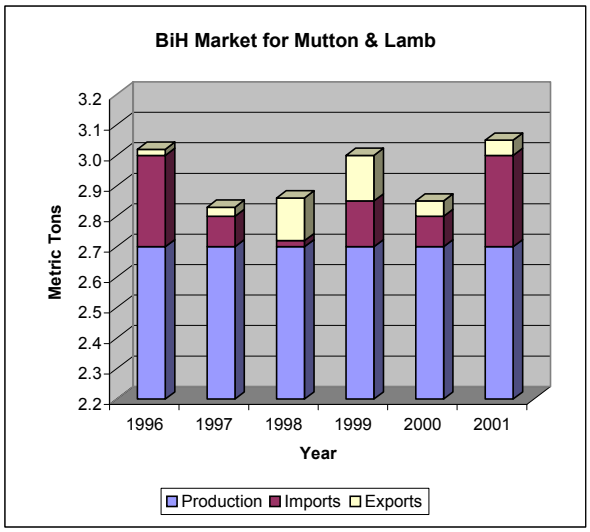
Product Factoid: FISH

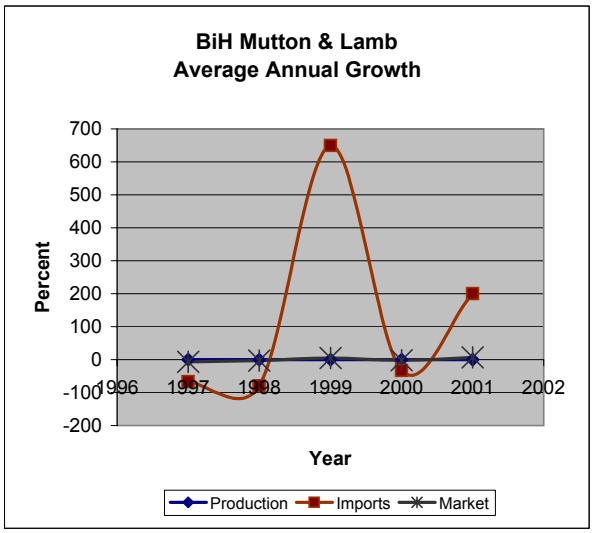
(000 Metric Tons, unless otherwise indicated)

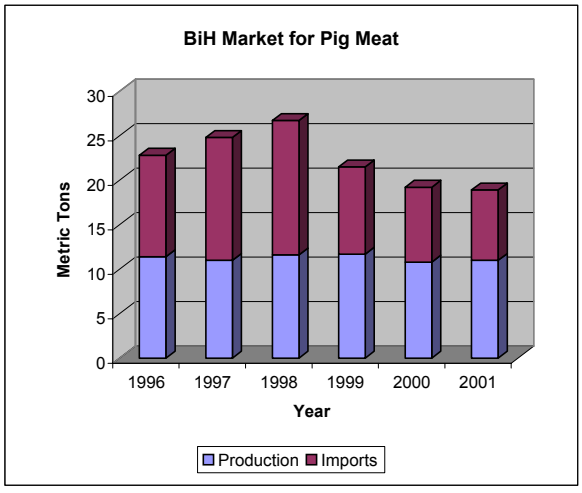
Product: Freshwater Fish	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.7	2.7	2.7			0.11
Total BiH								0.62	0.99	1.40	2.06		0.39
Average Annual Production Growth									59.7	41.4	47.1	49.41	
Total Imports						3.0		201.0					
Average Annual Import Growth													
Total Domestic Production + Imports													
Average Annual Market Growth													

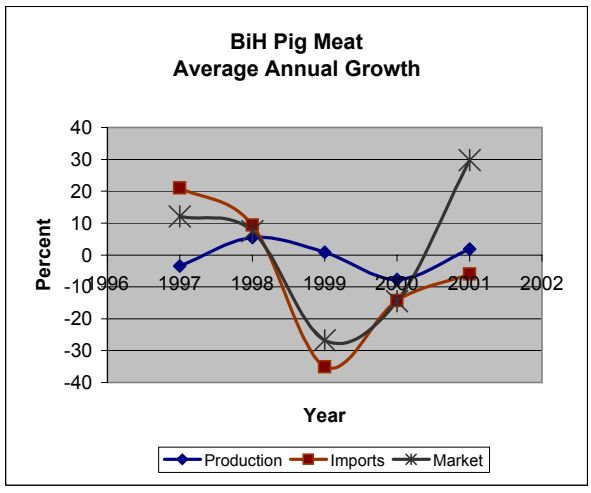

BiH Market for Beef & Veal
Metric Tons
18
16
14
12
10
8
6
4
2
0
1996
1997
1998
1999
2000
2001
Year
Production
Imports

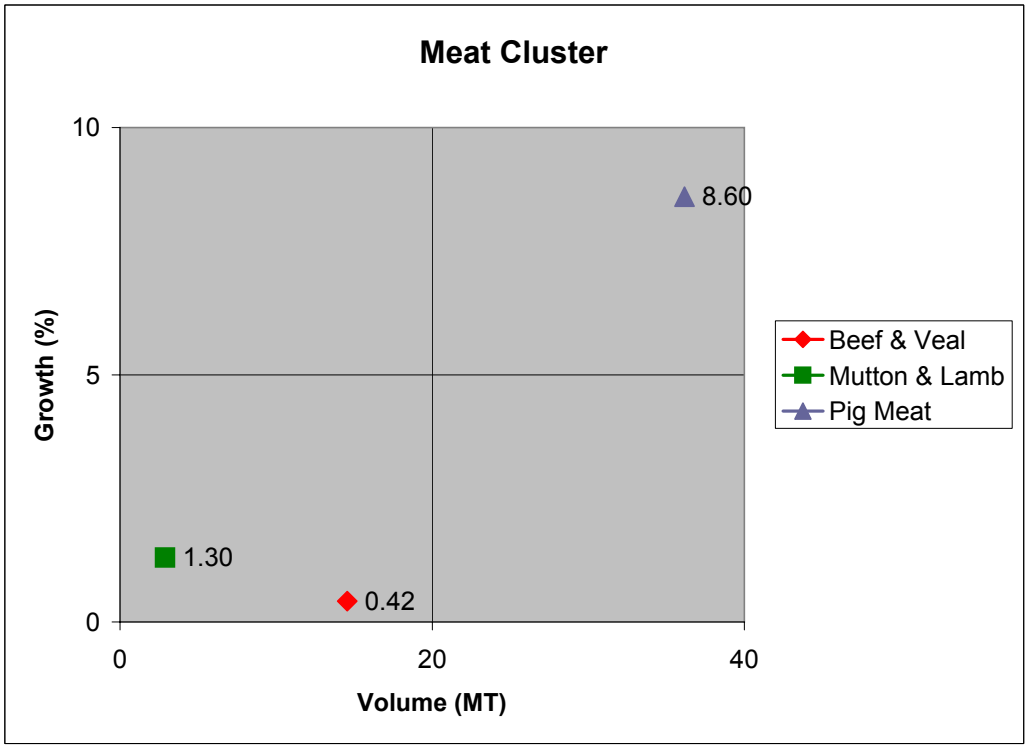

BiH Beef & Veal
Average Annual Growth
Percent
200
150
100
50
0
-50
-100
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market

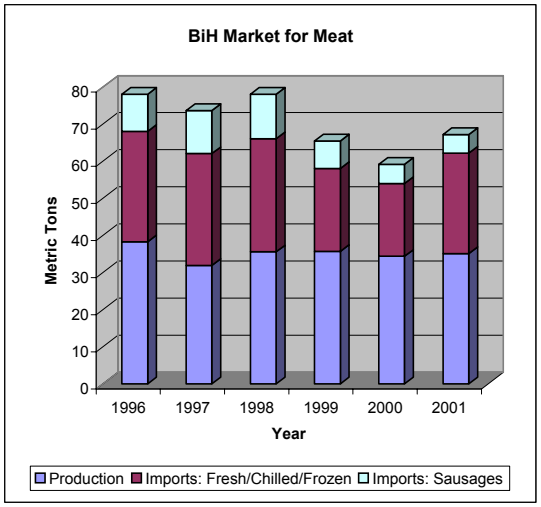

BiH Market for Mutton & Lamb
Metric Tons
3.2
3.1
3.0
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
1996
1997
1998
1999
2000
2001
Year
Production
Imports
Exports

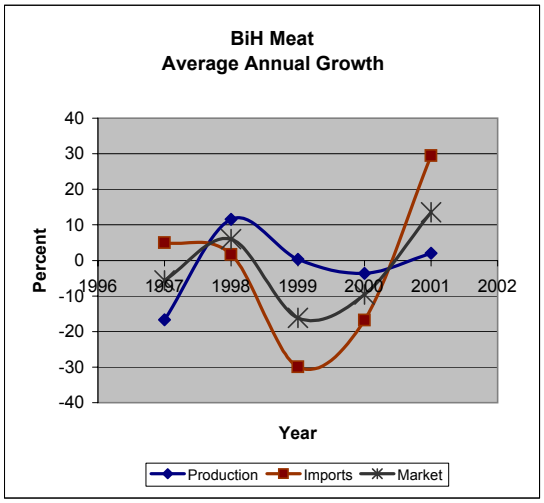

BiH Mutton & Lamb
Average Annual Growth
Percent
700
600
500
400
300
200
100
0
-100
-200
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market

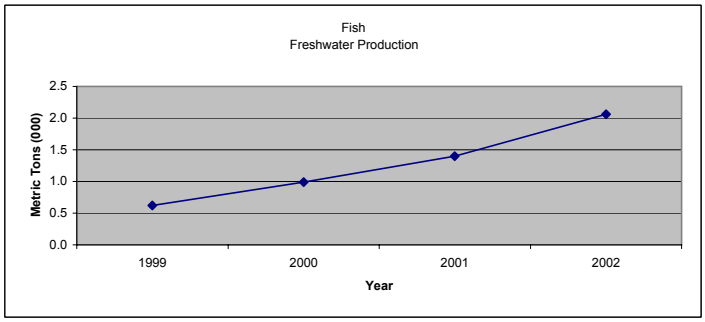

BiH Market for Pig Meat
Metric Tons
30
25
20
15
10
5
0
1996
1997
1998
1999
2000
2001
Year
Production
Imports


BiH Pig Meat
Average Annual Growth
Percent
40
30
20
10
0
-10
-20
-30
-40
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market









	Production	Imports	Market	Production	Imports	Market
Beef & Veal	-2.04	-4.73	0.42	12.63	1.93	14.57
Mutton & Lamb	0.55	120.00	1.30	2.70	0.08	2.88
Pig Meat	-12.15	21.41	8.60	11.17	8.70	36.17
Fish						

Product Factoid

Oilseeds

Product Factoid: OILSEEDS

(000 Metric Tons, unless otherwise indicated)

Product: Oilseeds	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Consumption													#DIV/0!
Total BiH Production	51.3	51.4	51.4	51.4	51.3	51.9	49.9	50.7	51.5	53.0	52.3	-2.78	1.05
Average Annual Production Growth					-0.2	1.1	-3.7	1.6	1.5	3.0	-1.4	0.27	
Total Imports	0.16	0.09	0.09	0.09	0.39	0.28	0.59	3.75	0.31	0.78		17.42	1.35
Average Annual Import Growth						-28.2	110.7	535.6	-91.7	151.6		135.60	
Total Domestic Production + Imports	51.5	51.5	51.5	51.5	51.7	52.1	50.5	54.5	51.8	53.8	52.3		1.47
Average Annual Market Growth					0.4	0.9	-3.1	7.8	-4.9	3.9	-2.8	0.31	

Product Factoid: RAPESEED

(000 Metric Tons, unless otherwise indicated)

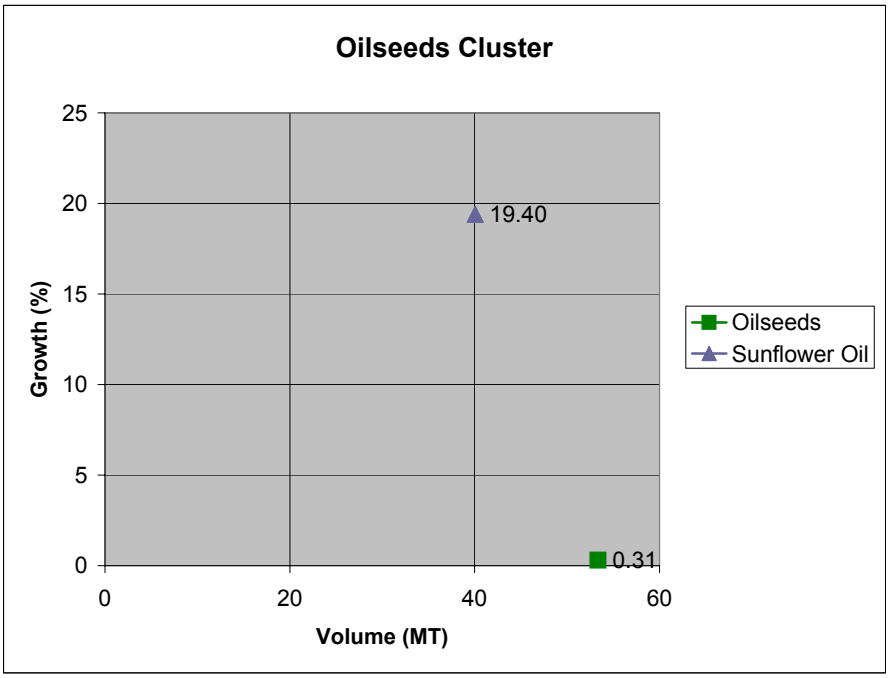
Product: Rapeseed	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	1.7	1.8	2.4	5.7	3.8	1.8	2.5	2.7	7.6	10.7			3.53
Total BiH Production	2.3	2.4	2.4	2.4	2.2	1.9	0.8	1.3	2.3	3.4	3.3	9.40	0.90
Average Annual Production Growth					-8.3	-13.6	-57.9	62.5	76.9	47.8	-2.9	14.92	
Total Imports													
Average Annual Import Growth													
Total Exports													
Total Domestic Production + Imports													
Average Annual Market Growth													

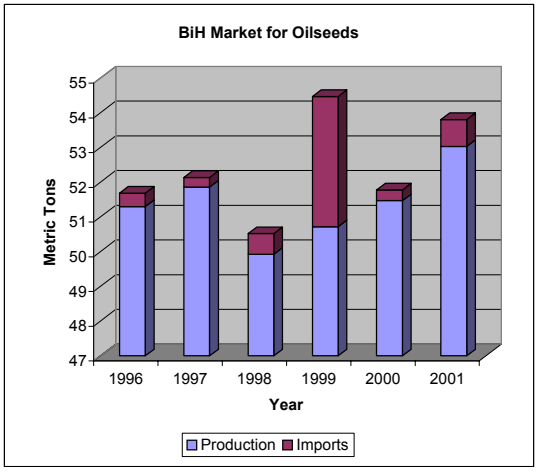
Product Factoid: SUNFLOWER OIL

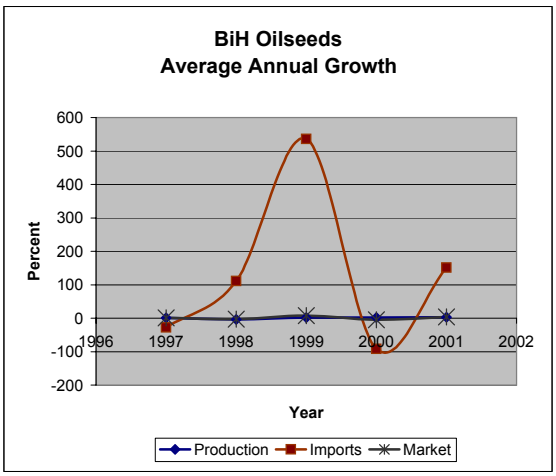
(000 Metric Tons, unless otherwise indicated)

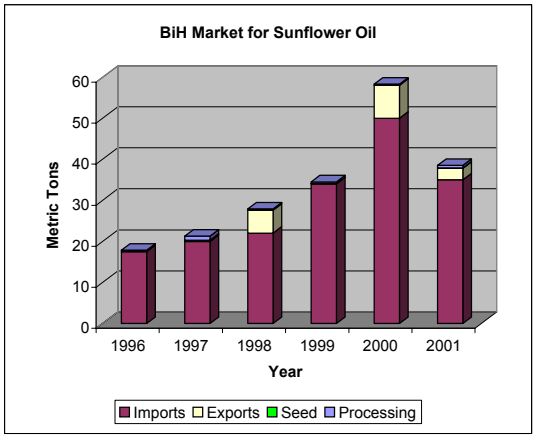
Product: Sunflower Oil	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	1.8	0.7	1.1	2.5	17.6	19.9	16.5	34.3	42.2	33.8			10.76
Sunflower Seed Production	0.72	0.60	0.59	0.50	0.25	0.10	0.18	0.07	0.11	0.07	0.10	-22.32	
Total BiH Production					0.10	0.96	0.13	0.42	0.17	0.63		39.6	0.34
Average Annual Production Growth						860.0	-86.5	223.1	-59.5	270.6		241.54	
Total Imports					17.5	20.0	22.0	34.0	50.0	35.0		21.41	12.34
Average Annual Import Growth						14.3	10.0	54.5	47.1	-30.0		19.18	
Total Exports					0.0	0.2	5.6	0.0	8.0	2.8		75.68	
Total Domestic Production + Imports	0.0	0.0	0.0	0.0	17.6	21.0	22.1	34.4	50.2	35.6			12.29
Average Annual Market Growth						19.1	5.6	55.5	45.8	-29.0		19.40	

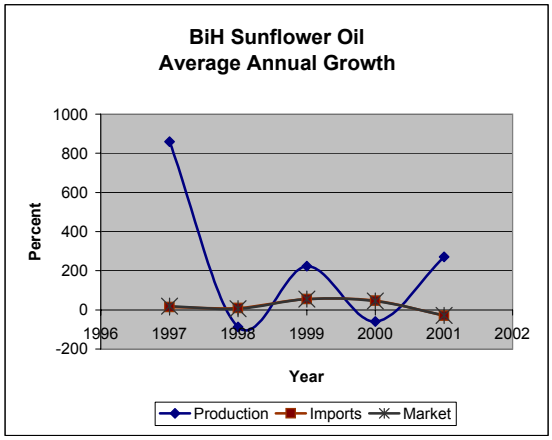
	Growth			Volume (3 yr avg)		
	Productic	Imports	Market	Productic	Imports	Market
Oilseeds	-2.78	17.42	0.31	51.74	1.61333	53.3533
Sunflowe	39.6	21.41	19.40	0.40667	39.6667	40.0733


Oilseeds Cluster
Growth (%)
Volume (MT)
19.40
0.31
Oilseeds
Sunflower Oil


BiH Market for Oilseeds
Metric Tons
Year
Production
Imports


BiH Oilseeds
Average Annual Growth
Percent
Year
Production
Imports
Market


BiH Market for Sunflower Oil
Metric Tons
Year
Imports
Exports
Seed
Processing


BiH Sunflower Oil
Average Annual Growth
Percent
Year
Production
Imports
Market

Product Factoid

Poultry

Product Factoid: BROILERS

(000 Metric Tons, unless otherwise indicated)

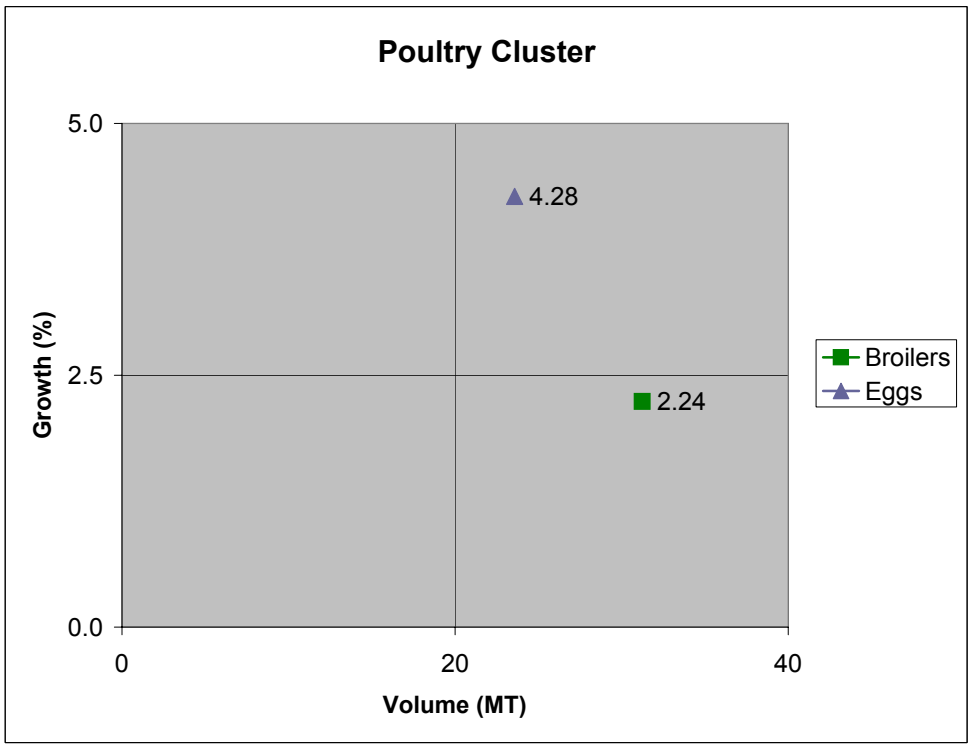
Product: Broilers	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	19.0	17.7	22.6	27.5	36.7	33.3	30.5	22.9	17.0	18.4			8.19
Total BiH Production	18.0	15.1	13.4	14.8	11.2	8.2	8.2	8.9	8.4	8.4	8.4	-3.77	1.16
Average Annual Production Growth					-24.3	-26.8	0.0	8.5	-5.6	0.0	0.0	-6.88	
Total Imports (Chicken Meat)	1.1	2.4	7.2	9.1	19.7	19.0	21.2	13.0	8.4	14.0		-12.43	4.91
Average Annual Import Growth					116.5	-3.6	11.6	-38.7	-35.4	66.7		19.52	
Total Exports (Chicken Meat)					0.02	0.01	0.09	0.09	0.09	0.05		29.99	0.04
Average Annual Export Growth						-50.00	800.00	0.00	0.00	-44.44		141.11	
Total Domestic Production + Imports	20.1	20.1	29.8	36.6	56.4	52.3	51.7	35.9	25.4	32.4			12.74
Average Annual Market Growth					54.1	-7.3	-1.1	-30.6	-29.2	27.6		2.24	

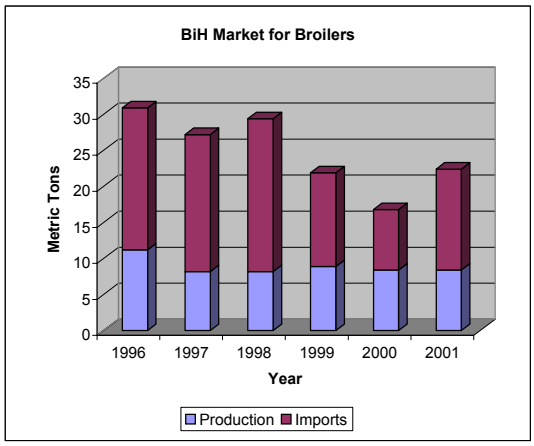
Product Factoid: EGGS

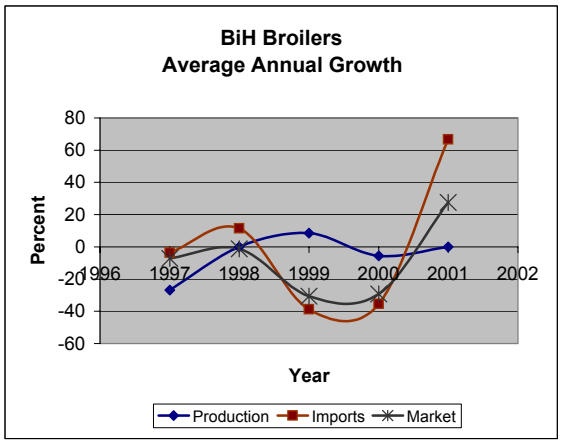
(000 Metric Tons, unless otherwise indicated)

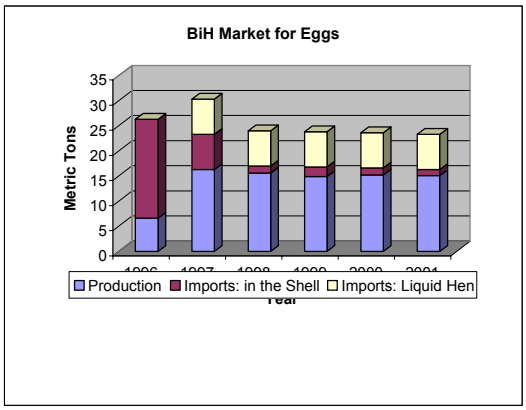
Product: Eggs	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	19.9	18.6	15.6	15.1	25.8	23.2	17.0	16.9	16.6	16.3			4.12
Total BiH Production	20.0	17.0	9.0	6.9	6.6	16.3	15.6	14.9	15.2	15.1	15.1	11.7	3.63
Average Annual Production Growth					-4.3	147.0	-4.3	-4.5	2.0	-0.7	0.0	19.31	
Imports (in the shell)	0.0	1.5	6.4	7.7	19.7	7.0	1.4	1.9	1.4	1.2		-40.78	7.33
Imports (liquid hen)	0.0	10.0	5.0	5.0	0.0	7.0	7.0	7.0	7.0	7.0			2.86
Total Imports	0.0	11.5	11.4	12.7	19.7	14.0	8.4	8.9	8.4	8.2			
Average Annual Import Growth					55.1	-28.9	-40.0	6.0	-5.6	-2.4		-2.64	
Total Domestic Production + Imports	20.0	28.5	20.4	19.6	26.3	30.3	24.0	23.8	23.6	23.3			2.71
Average Annual Market Growth					34.2	15.2	-20.8	-0.8	-0.8	-1.3		4.28	

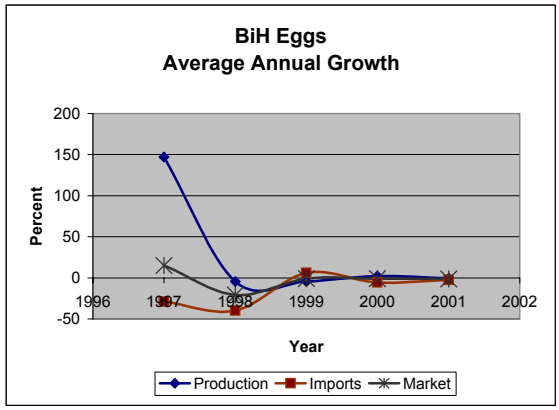
	Growth			Volume (3 yr avg)		
	Productic	Imports	Market	Productic	Imports	Market
Broilers	-3.77	-12.43	2.24	8.57	11.80	31.23
Eggs	19.3	-2.64	4.28	15.07	8.50	23.57


Poultry Cluster
5.0
2.5
0.0
Growth (%)
4.28
2.24
0
20
40
Volume (MT)
Broilers
Eggs


BiH Market for Broilers
35
30
25
20
15
10
5
0
Metric Tons
1996
1997
1998
1999
2000
2001
Year
Production
Imports


BiH Broilers
Average Annual Growth
80
60
40
20
0
-20
-40
-60
Percent
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market


BiH Market for Eggs
35
30
25
20
15
10
5
0
Metric Tons
Production
Imports: in the Shell
Imports: Liquid Hen


BiH Eggs
Average Annual Growth
200
150
100
50
0
-50
Percent
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market

Product Factoid

Special

Product Factoid: NUTS

(000 Metric Tons, unless otherwise indicated)

Product: Nuts (esp. Walnuts)	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Supply/Capita/Year (Kg)	2.8	3.7	3.9	3.8	3.9	4.5	4.0	3.2	2.9	2.8		-9.46	0.68
Total BiH Production	2.0	3.3	3.3	3.3	3.3	4.5	3.3	3.1	2.4	2.5	2.6		
Average Annual Production Growth					0.0	36.4	-26.7	-6.1	-22.6	4.2	4.0	-1.54	22.63
Total Imports					0.35	0.13	0.80	0.02	0.32	0.14			
Average Annual Import Growth						-62.9	515.4	-97.5	1500.0	-56.3		359.76	686.50
Total Exports					0.14	0.31	0.26	0.00	0.00	0.00			
Average Annual Export Growth						121.4	-16.1	-100.0	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Total Domestic Production + Imports					3.65	4.63	4.10	3.12	2.72	2.64			
Average Annual Market Growth						26.8	-11.4	-23.9	-12.8	-2.9		-4.85	19.23

Product Factoid: WINE

(000 Metric Tons, unless otherwise indicated)

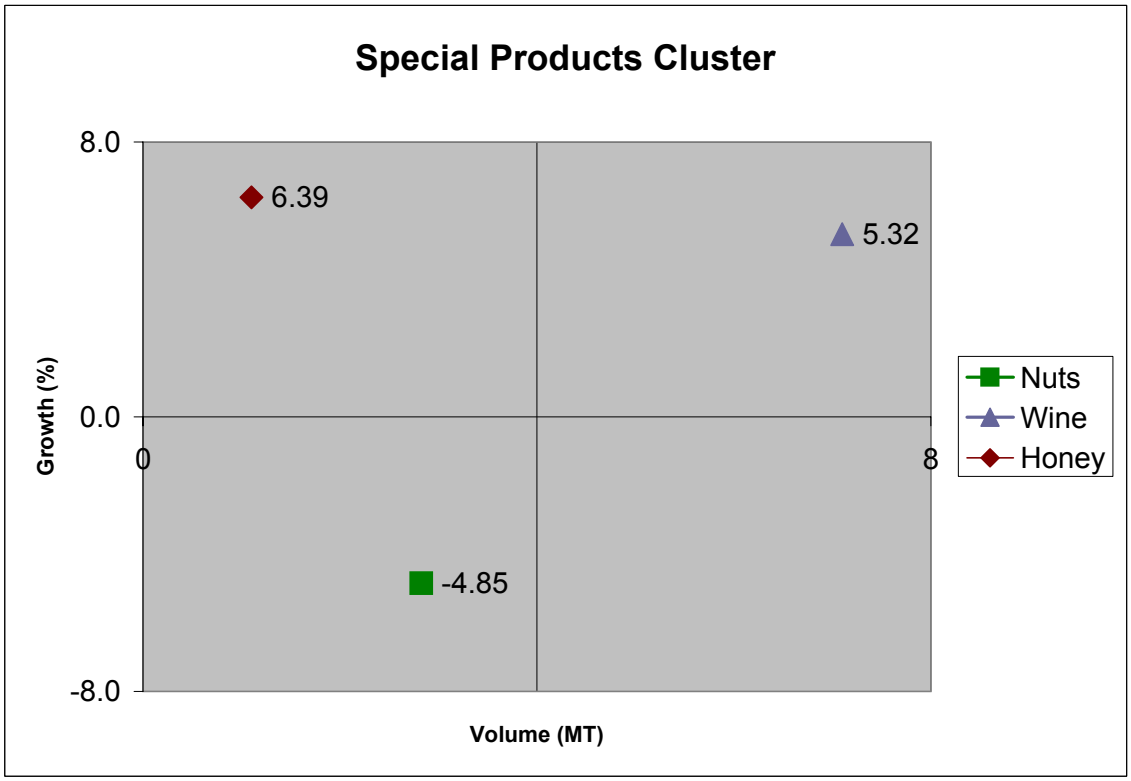
Product: Wine	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	22.3	12.6	10.3	18.4	3.8	0.7	7.1	5.4	5.7	10.3		39.26	3.21
Total BiH Production	14.0	7.9	3.5	3.4	4.7	0.9	6.9	5.8	4.8	5.0	5.2	15.58	2.03
Average Annual Production Growth					38.2	-80.9	666.7	-15.9	-17.2	4.2	4.0	85.58	
Total Imports	9.0	13.0	7.2	17.0	1.8	2.1	0.6	1.8	1.4	2.5		21.43	0.65
Average Annual Import Growth					-89.4	16.7	-71.4	200.0	-22.2	78.6		18.70	
Total Exports	0.7		0.5	2.0	2.7	2.3	0.4	2.2	0.4	1.9		-13.35	1.00
Average Annual Export Growth					35.0	-14.8	-82.6	450.0	-81.8	375.0		113.46	
Total Domestic Production + Imports	23.0	20.9	10.7	20.4	6.5	3.0	7.5	7.6	6.2	7.5			1.76
Average Annual Market Growth					-68.1	-53.8	150.0	1.3	-18.4	21.0		5.32	

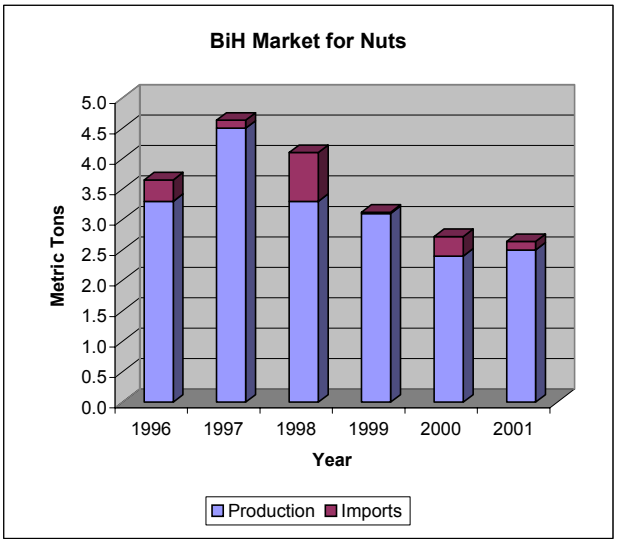
Product Factoid: HONEY

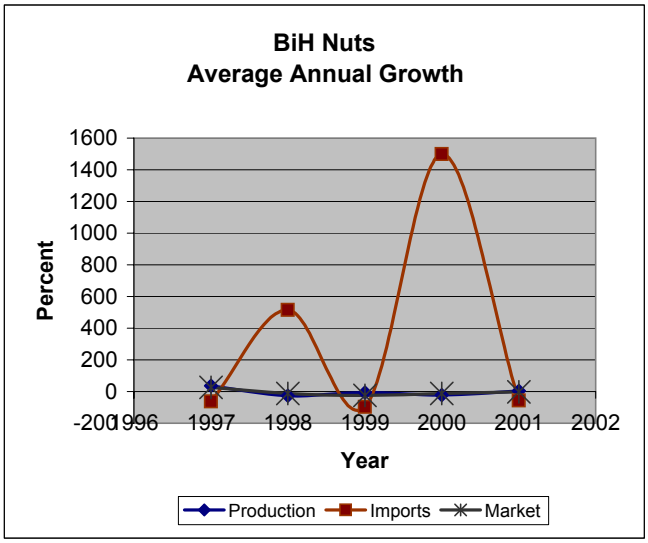
(000 Metric Tons, unless otherwise indicated)

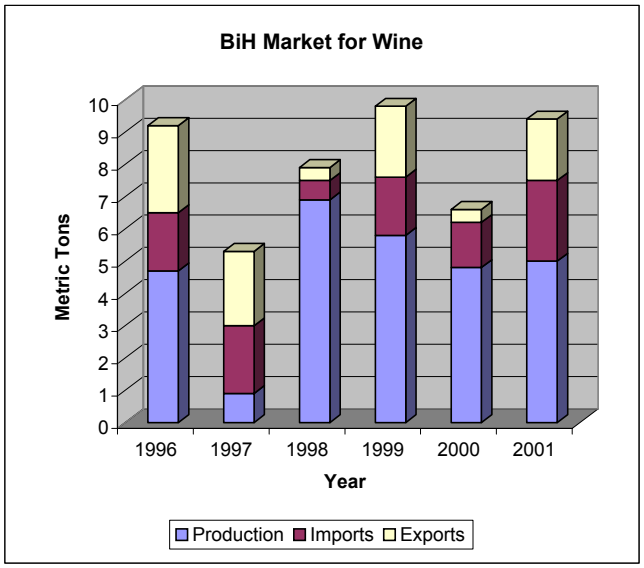
Product: Honey	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Growth (%)	STD DEV
Total Domestic Supply	0.5	0.4	0.7	0.6	0.8	0.9	0.9	1.0	1.0	1.0			0.08
Total BiH Production	0.5	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.0		0.14
Average Production Annual Growth					20.0	16.7	14.3	0.0	12.5	11.1	0.0	10.65	
Total Imports	0	0	0.3	0.2	0.2	0.3	0.1	0.1	0.1	0.1			0.08
Average Import Annual Growth					0.0	50.0	-66.7	0.0	0.0	0.0		-2.78	
Total Domestic Production + Imports	0.5	0.4	1.0	0.8	1.0	1.2	1.0	1.1	1.1	1.1			0.08
Average Market Annual Growth					25.0	20.0	-16.7	10.0	0.0	0.0		6.39	

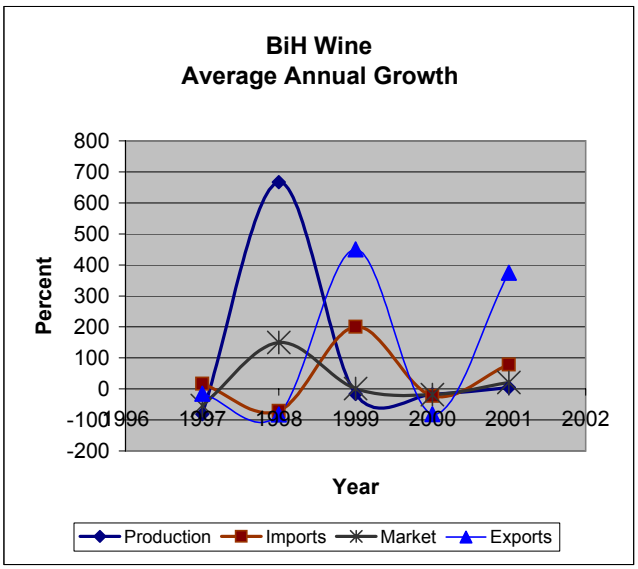
	Growth			Volume (3 yr avg)		
	Productic	Imports	Market	Productic	Imports	Market
Nuts	-1.54	359.76	-4.85	2.67	0.16	2.83
Wine	15.58	21.43	5.32	5.20	1.90	7.10
Honey	10.65	-2.78	6.39	0.90	0.10	1.10

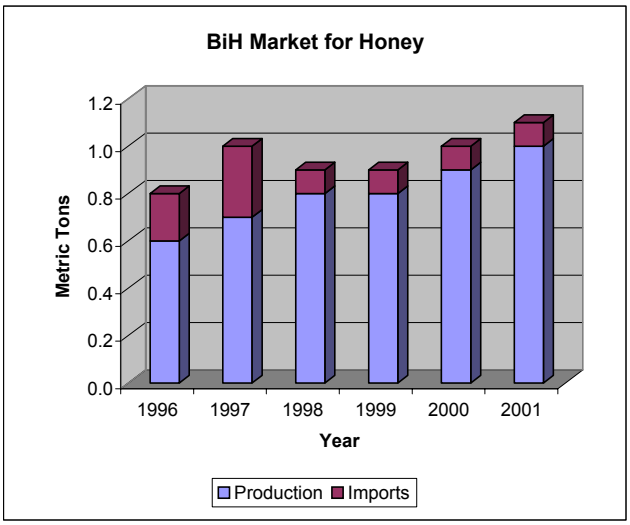

Special Products Cluster
8.0
0.0
-8.0
0
8
6.39
5.32
-4.85
Growth (%)
Volume (MT)
Nuts
Wine
Honey

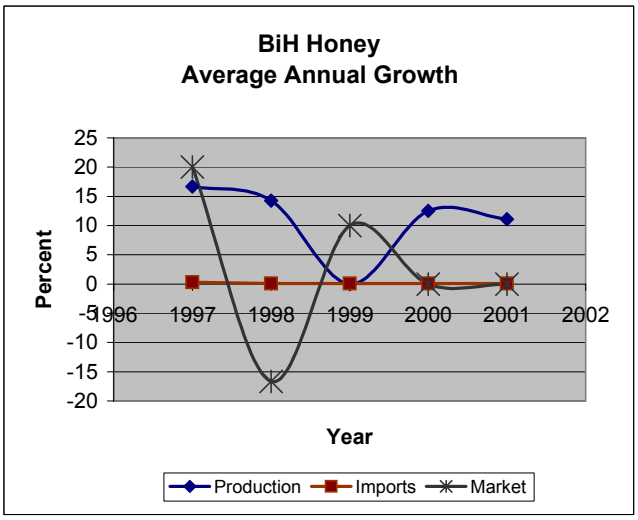

BiH Market for Nuts
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Metric Tons
1996
1997
1998
1999
2000
2001
Year
Production
Imports


BiH Nuts
Average Annual Growth
1600
1400
1200
1000
800
600
400
200
0
-200
Percent
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market


BiH Market for Wine
Metric Tons
10
9
8
7
6
5
4
3
2
1
0
1996
1997
1998
1999
2000
2001
Year
Production
Imports
Exports


BiH Wine
Average Annual Growth
Percent
800
700
600
500
400
300
200
100
0
-100
-200
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market
Exports


BiH Market for Honey
Metric Tons
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1996
1997
1998
1999
2000
2001
Year
Production
Imports


BiH Honey
Average Annual Growth
Percent
25
20
15
10
5
0
-5
-10
-15
-20
1996
1997
1998
1999
2000
2001
2002
Year
Production
Imports
Market

ATTACHMENT 2

EASTERN EUROPEAN
AGRICULTURAL PRODUCT GROWTH RATES

MARKET ANALYSIS KEY FINDINGS

The data for the analysis of secondary market information derive from the FAO's statistical database—FAOSTAT—unless otherwise indicated. The FAOSTAT data, in turn, come from the Statistic Office of FBiH. Data on the RS is not included in this data set because the RS Statistical Office has not provided information to BiH or FAO on the area under its jurisdiction. Consequently, the analysis *understates* product volume and probably does not accurately reflect overall growth. Data for years before 1996 are included in each "product factoid" when available. These data are included as indicative of market status before the war, but these earlier years are not included in growth or other calculations. Manipulated data are restricted exclusively to the post-war period: 1996 to the present. No attempt is made to forecast growth in this analysis, although annual average growth rates likely indicate future growth trends.

Data analysis shows production, production growth, imported quantities, import growth, market size (domestic production + imports), and market growth. Where significant, exports are also included. The standard deviation of production is taken as a reasonable proxy for market volatility. One observation is merited: in discussing the quality of data with an individual familiar with the statistical office, it was stated that the data are probably fairly accurate. Since tariffs have not been significant, traders have not had incentives to avoid detection and have tended to give accurate report of their economic activity. If this is true, the following analysis, while understating the RS, should at least reflect *magnitudes* with some degree of reliability.

Market Overall

- Best combination of growth/volume/value: berries, broilers, butter, ice cream, juices & syrup, milk, pork, sunoil, and yogurt.
- There are seven products with over 10% growth: butter, ice cream, juices & syrup, maize, milk, oats and sunoil; barley and pork have promising growth-to-volume ratios.
- Eliminate from consideration: wheat, nuts, and potatoes. As subsectors, fruit and vegetables are not very promising, although certain products within these subsectors (i.e., berries) may be. Beef and veal do not look promising, though further research into these products may indicate otherwise.

Cereal Cluster

It is informative to quickly assess key raw material sources:

- Oats have a surprising growth rate, with volumes between 80 to 90,000 MT. Oats have substantial import volatility, but from a small import base. Domestic production is also volatile. Several data outliers appear to misrepresent the product's overall potential.
- Barley is almost the same as oats, but without the statistical outliers. A promising profile—potential as an input into brewing?
- Maize—used for feed or human consumption? Where is the source of growth coming from? Why is there such serious market volatility?
- Wheat—production is half of domestic supply, must be a lot in storage. Serious amount of imports.

Fruit

- Imports equal domestic production. Berries and grapes (and perhaps melons?) are probably the best opportunities given their shorter investment horizons. Marked volatility.
- Some product data seem not to be available.

Meat

- Overall—fresh/chilled/frozen categories most likely are opportunities, given significant domestic growth potential to compete with imports. Production has been steady for all products.
- Pork—most promising meat subsector. Production levels unchanged since 1996 while consumption grows apace through imports.
- Mutton—some export potential.
- Beef—market volatility.

Oilseeds

- Sunflower is an unusual product. Sunflowers appear to be almost entirely re-exports. There is huge processing potential. Raw material has declined by over 20% in recent years, most likely due to the loss of local processing capacity. With renewed local processing could be major growth opportunity.

Poultry

- Eggs—opportunity in particular to compete in the liquid egg market segment.
- Broilers—import competing opportunity, though need to examine production and processing costs.

Special products

- Nuts—mostly walnuts—a non-starter due to declining growth and extreme volatility.
- Honey—combines decent growth with room to compete against imports. There is new demand in this market from herbal/nutrition industry buyers. Very high value per kilogram, but historically honey has performed poorly as a target of donor assistance.
- Wine—there is room to compete against growing imports. There also appears to be export (or re-export?) potential.

Vegetables

- Growth is declining for major products while imports remains steady.
- Market volatility is not excessive.
- Field potatoes are a non-starter; assistance would have to be predicated on a differentiation strategy and the introduction of new varieties to supply processors, which currently don't seem to exist.

Dairy

- Milk—high volume and high growth. Herd size steady at about 440,000 since 1998. Short-term solutions to some problems are possible, such as improving feed quality and timing. For several of the key dairy products, fat content could be an issue, which needs further research. Products such as butter and ice cream need milk with high-fat content, which may explain in part the unusually high import volumes for these products. Improving fat content can entail improved feed and feeding, but may also require the introduction of new breeds.
- Cheese—a declining market with growth going into reverse. There are a couple of specific types of cheese that seem to be doing well, at least anecdotally. These types include Travnik and Vlasicki. However, data are not available on such narrow categories of goods.
- Butter—very high potential to compete against imports.
- Yogurt—as butter, has high potential to compete against imports. There are also product differentiation opportunities, including blending with fruit, organic, whipping, etc.
- Ice cream—very high growth with very low volumes, but also very high value. A niche market opportunity.

Eastern Europe*: Agricultural Production and Growth

			Year			
Production (Mt)	**1998**	**1999**	**2000**	**2001**	**2002**	**Average**
Barley	10,603,919	9,620,260	7,820,114	10,506,815	9,552,236	
growth		-9.3	-18.7	34.4	-9.1	-0.7
Beef and Veal	1,211,697	1,131,970	1,082,270	1,029,208	926,427	1,076,314
growth		-6.6	-4.4	-4.9	-10.0	-6.5
Berries	392,622	450,454	421,822	534,303	451,091	450,058
Berries nes	7,100	12,100	9,000	8,600	7,900	
Blueberries	19,600	25,500	25,500	33,000	18,900	
Raspberries	129,233	137,091	125,146	147,628	166,138	
Strawberries	236,689	275,763	262,176	345,075	258,153	
growth		14.7	-6.4	26.7	-15.6	4.9
Butter	296,977	296,586	280,313	304,628	302,304	296,162
growth		-0.1	-5.5	8.7	-0.8	0.6
Cheese	960,691	941,069	939,308	979,370	962,726	956,633
growth		-2.0	-0.2	4.3	-1.7	0.1
Fruit	10,447,057	9,572,828	10,758,551	11,359,570	10,135,703	10,454,742
growth		-8.4	12.4	5.6	-10.8	-0.3
Grapes	3,474,442	3,210,172	3,731,224	3,645,665	3,099,813	3,432,263
growth		-7.6	16.2	-2.3	-15.0	-2.2
Eggs	1,458,107	1,418,946	1,399,537	1,439,900	1,441,748	1,431,648
growth		-2.7	-1.4	2.9	0.1	-0.3
Honey	60,779	60,472	60,679	62,244	60,910	61,017
growth		-0.5	0.3	2.6	-2.1	0.1
Maize	26,071,165	31,376,298	17,952,201	29,463,352	28,734,200	26,719,443
growth		20.3	-42.8	64.1	-2.5	9.8
Milk	30,200,421	29,712,511	29,028,774	29,185,725	29,539,243	29,533,335
growth		-1.6	-2.3	0.5	1.2	-0.5
Mutton and Lamb	158,627	159,151	157,385	161,458	149,848	157,294
growth		0.3	-1.1	2.6	-7.2	-1.3
Oats	2,526,974	2,600,434	1,847,304	2,346,903	2,513,495	2,367,022
growth		2.9	-29.0	27.0	7.1	2.0
Sunflower Oil	935,800	982,442	737,782	838,576	718,394	842,599
growth		5.0	-24.9	13.7	-14.3	-5.1
Pigmeat	4,936,627	5,053,163	4,722,103	4,482,742	4,234,581	4,685,843
growth		2.4	-6.6	-5.1	-5.5	-3.7
Potatoes	35,415,725	29,992,777	32,896,147	28,625,275	24,757,231	30,337,431
growth		-15.3	9.7	-13.0	-13.5	-8.0
Poultry-broilers	1,862,051	1,886,174	1,954,350	2,141,972	2,237,342	2,016,378
growth		1.3	3.6	9.6	4.5	4.7
Vegetables	18,356,187	17,999,148	16,269,913	17,268,151	16,569,026	17,292,485
growth		-1.9	-9.6	6.1	-4.0	-2.4
Nuts	87,300	94,172	97,254	91,893	89,539	92,032
growth		7.9	3.3	-5.5	-2.6	0.8
Wheat	33,683,528	27,769,907	29,603,756	37,042,722	32,149,779	32,049,938
growth		-17.6	6.6	25.1	-13.2	0.2
Wine	1,915,722	1,693,350	1,839,452	1,969,054	1,637,495	1,811,015
growth		-11.6	8.6	7.0	-16.8	-3.2

Countries in Eastern Europe include:
Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Macedonia (TFYR)
Poland, Romania, Serbia and Montenegro, Slovakia, Slovenia

ATTACHMENT 3

PRICE-PONT ANALYSIS AGGREGATE AND REGIONAL

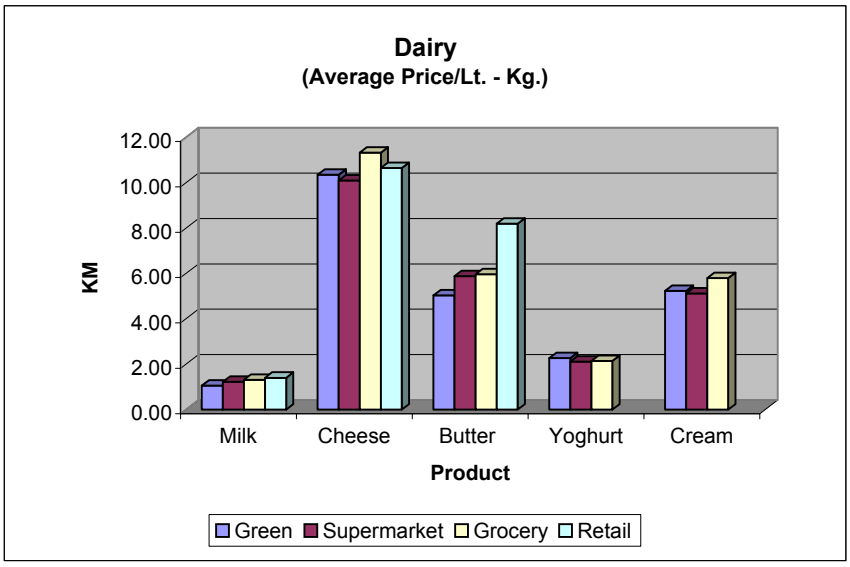
PRICE-POINT DATA ANALYSIS

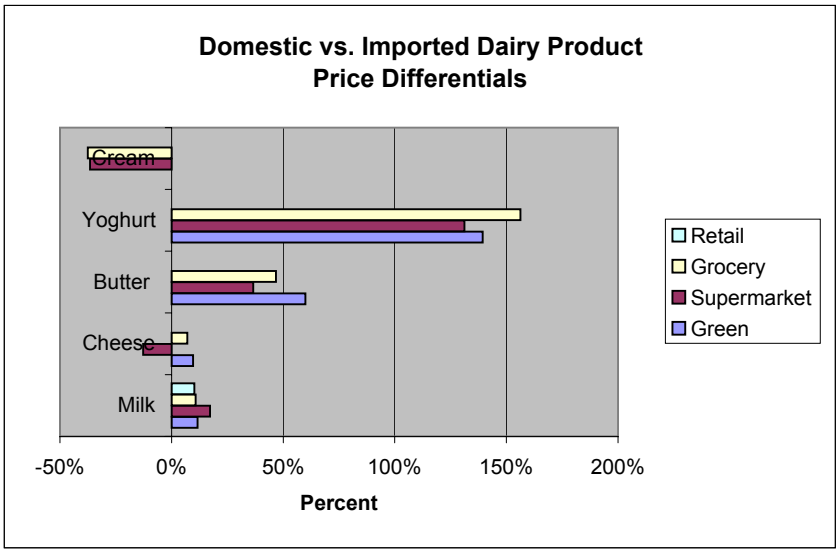
Following are summary observations on the price-point data gathered by LAMP Team members who conducted market surveys in Sarajevo, Banja Luka, Mostar, and Tuzla. During these surveys Team members gathered price information on products that could be targets of future LAMP assistance in industry clusters, including dairy, flour, meat, poultry, fruit, vegetables, and other products not fitting into the other categories. The analysis examined price ranges of domestically produced and imported products in the selected categories, average prices, and domestic/import price differentials. Targeted markets where prices were collected included: green markets, supermarkets, grocery stores, and retail shops.

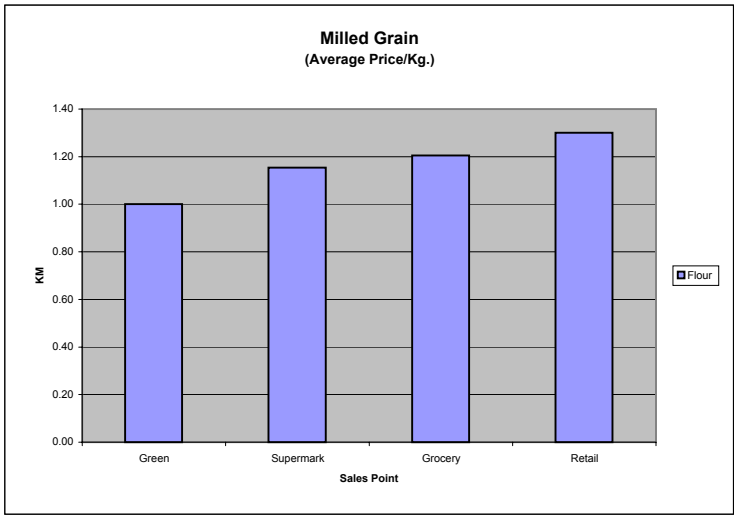
Before reviewing the findings, though, note that the data are indicative: The number of observations is too few to draw conclusions that are within a reasonable margin of error. This is not the case for all goods, but for more than half of them. The data on dairy products, for instance, are fairly robust. The analysis could still benefit from new price data on the narrower range of products now being considered for LAMP support.

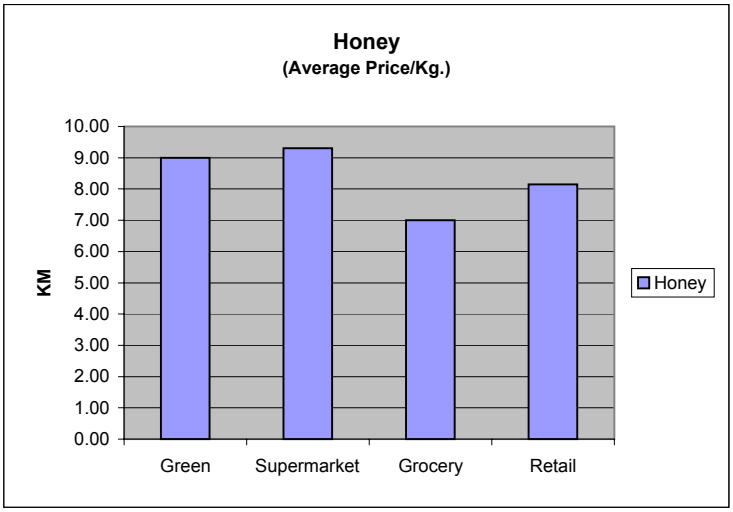
BiH goods tend to compete on cost—they typically cost less than imported products. As a competitiveness strategy, cost-based competitive advantage is easily eroded by lower cost suppliers, notably from firms within countries such as China. On the other hand, we had heard tales of BiH goods not being able to compete with imports even on a cost basis. This information is clearly wrong.

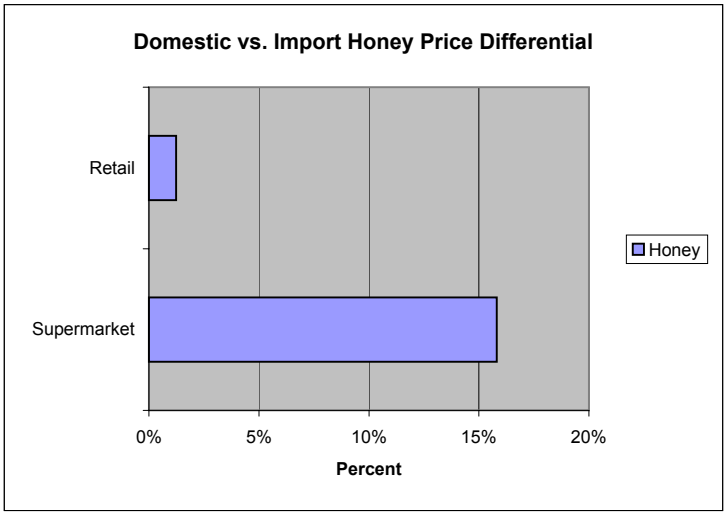
- Certain BiH goods are competing head-to-head with imports and even seem to attract a price premium—notably, fish, cream, broilers, and certain cheeses.
- The lowest prices are in green markets; presumably because green market goods tend to be lower quality, have less packaging, etc. Grocery stores are, on average, more expensive than supermarkets. Retail shops tend to be the most expensive outlets for the goods they carry.
- There are inexplicably large price differentials between a significant number of imported goods and BiH goods. Why these differentials are so large needs further investigation. There is no apparent reason why imported pork commands a 130% price premium over domestically produced pork. Similarly large differentials exist among other products. One can infer (without substantiation) that domestic sellers could use a lesson in how to set prices.
- Dairy: There are opportunities to compete against high-priced imports for yogurt and butter; cream and cheese products seem to be fairly price competitive at present.
- Milled grain and honey did not have price-points for competing imports, so the price differentials for these goods are uncertain.
- Meat: As with milled grain and honey, prices for competing beef and mutton imports are lacking. Pork imports are very pricey relative to domestically produced pork, indicating a potential window of opportunity for BiH producers and processors. BiH fish seem to attract a price premium that could be turned into a competitive advantage.
- Processed produce: Jams & juices look to be opportunities, though may require significant investment and training. These opportunities are certainly realizable, given that BiH manufacturers are currently getting price premiums on pickled vegetables and ketchup.

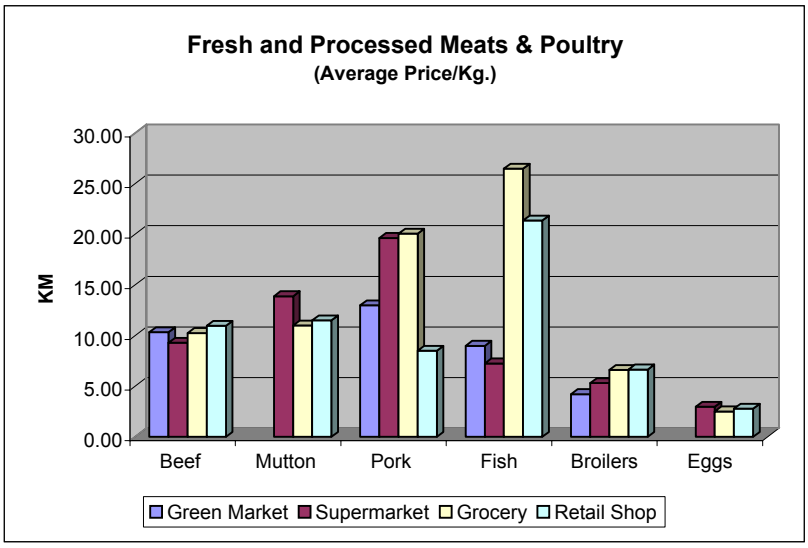

Dairy
(Average Price/Lt. - Kg.)
12.00
10.00
8.00
6.00
4.00
2.00
0.00
KM
Milk
Cheese
Butter
Yoghurt
Cream
Product
Green
Supermarket
Grocery
Retail

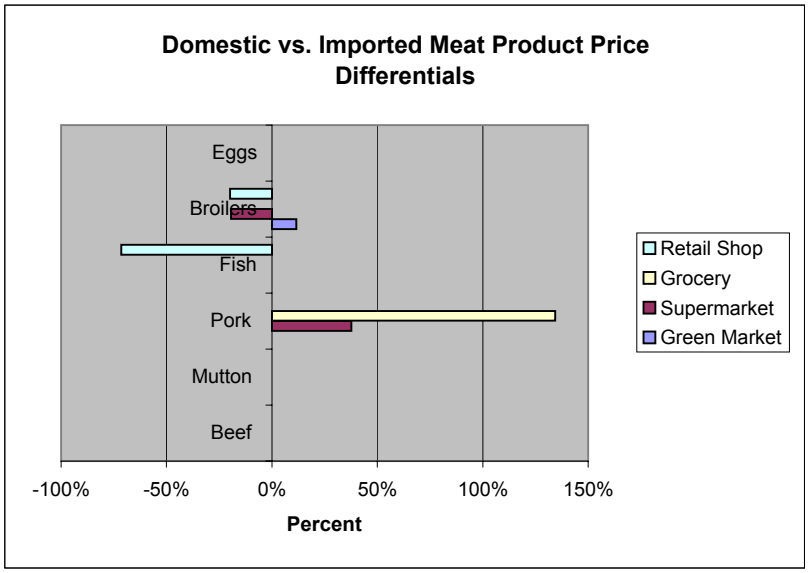

Domestic vs. Imported Dairy Product
Price Differentials
Cream
Yoghurt
Butter
Cheese
Milk
-50%
0%
50%
100%
150%
200%
Percent
Retail
Grocery
Supermarket
Green

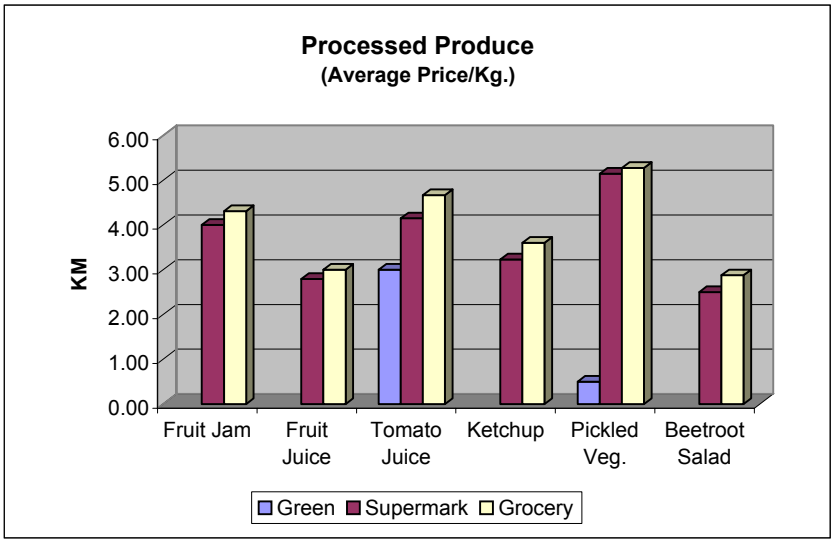

Milled Grain
(Average Price/Kg.)
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
KM
Green
Supermark
Grocery
Retail
Sales Point
Flour

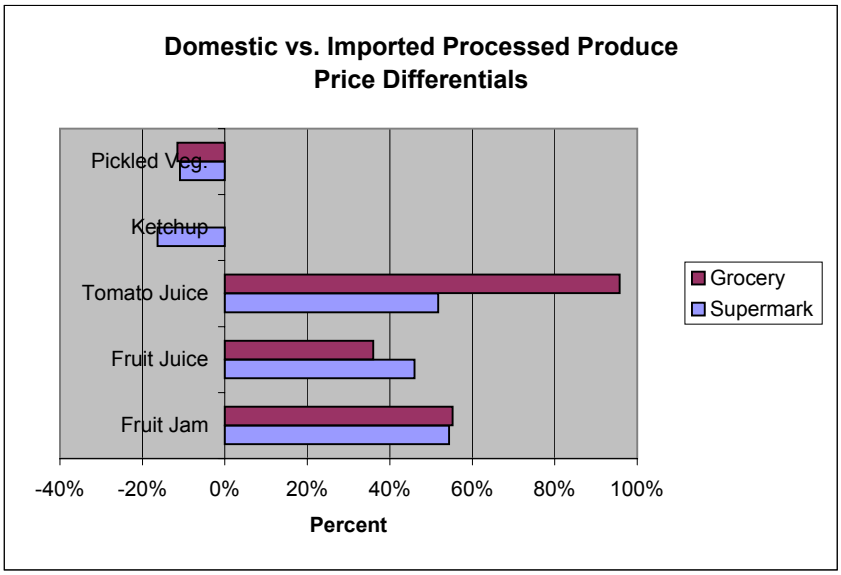

Honey
(Average Price/Kg.)
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
KM
Green
Supermarket
Grocery
Retail
Honey


Domestic vs. Import Honey Price Differential
Retail
Supermarket
0%
5%
10%
15%
20%
Percent
Honey


Fresh and Processed Meats & Poultry
(Average Price/Kg.)
KM
30.00
25.00
20.00
15.00
10.00
5.00
0.00
Beef
Mutton
Pork
Fish
Broilers
Eggs
Green Market
Supermarket
Grocery
Retail Shop


Domestic vs. Imported Meat Product Price Differentials
Eggs
Broilers
Fish
Pork
Mutton
Beef
-100%
-50%
0%
50%
100%
150%
Percent
Retail Shop
Grocery
Supermarket
Green Market


Processed Produce
(Average Price/Kg.)
KM
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Fruit Jam
Fruit Juice
Tomato Juice
Ketchup
Pickled Veg.
Beetroot Salad
Green
Supermark
Grocery


Domestic vs. Imported Processed Produce
Price Differentials
Pickled Veg.
Ketchup
Tomato Juice
Fruit Juice
Fruit Jam
-40%
-20%
0%
20%
40%
60%
80%
100%
Percent
Grocery
Supermark

Pricepoint Data

Dairy

Location	Item		Item Size	Conversion Price (Kg/KM)				Price Range	Origin	Differentiation
				P1	P2	P3	P4			
	Product	Category		Green	Supermark	Grocery	Retail			
Banja Luka	Milk	UHT	Lt	1.00	0.93	1.30		0.37	BiH: BL Mljekara	
Banja Luka	Milk	UHT	Lt	1.00	1.00	1.30		0.30	BiH: Mljekoprodukt	
Banja Luka	Milk	UHT	Lt	1.20	1.30	1.50		0.30	Croatia: Dukat	
Mostar	Milk	Fresh, whole	Lt		1.25		1.30	0.05	Slovenia	
Mostar	Milk	Fresh, 2%	Lt		1.68		1.50	0.18	Slovenia	
Mostar	Milk	Fresh, 2%	Lt		1.47		1.50	0.03	Croatia	
Mostar	Milk	Fresh, 2%	Lt		1.22		1.30	0.08	BH: Meggle	
Sarajevo	Milk	UHT	Lt	1.15	1.15	1.35		0.20	Hung (P1), BH, Croat (P2), Slov (P3)	
Sarajevo	Milk	Pasturized	Lt	1.30	1.30	1.40		0.10	BH	
Tuzla	Milk	Fresh Milk	Lt	0.66	0.99	1.00		0.34	BH: TC/Dairy/Farms unpasturized	
Tuzla	Milk	UHT	Lt		1.04	1.04		0.00	BH: Tuzla Dairy	
Tuzla	Milk	UHT	Lt		1.10	1.15		0.05	BH: Meggle Bihac	
Tuzla	Milk	UHT	Lt		1.28	1.50		0.22	BH: Dukat Croatia	
Tuzla	Milk	UHT	Lt		1.47	1.60		0.13	BH: Alpsko Slovenia	
Range				0.64	0.75	0.60	0.20	0.55		
Average Price				1.05	1.23	1.31	1.40	1.25		
Average Import				1.18	1.35	1.43	1.43	1.34		
Average BH				1.05	1.15	1.29	1.30	1.20		
Difference				0.12	0.20	0.14	0.13	0.15		
Percent Difference				12%	17%	11%	10%	0.12		
Banja Luka	Cheese	cottage	Kg	3.50	3.00	3.60		0.60	BiH	
Banja Luka	Cheese	Vlasicki	Kg	7.00	8.00	7.50		1.00	BiH	
Mostar	Cheese	Travnik	Kg		6.96		8.50	1.54	BiH	
Mostar	Cheese	Livno	kg		12.65		12.80	0.15	BiH	
Sarajevo	Cheese	Feta	500 g	9.40	9.20	9.60		0.40	BH	
Sarajevo	Cheese	Vlasnica	100 g	28.00	28.00	30.00		2.00	BH	
Sarajevo	Cheese	Travnik	500 g	9.40	9.60	9.80		0.40	BH	
Sarajevo	Cheese	Phil Cream	250 g	11.20	11.20	12.00		0.80	Hung	Plain & flavored
Tuzla	Cheese	Fresh	Kg.	4.00	5.50	6.80		2.80	BH	
Tuzla	Cheese	Fresh	Kg.		6.90			0.00	Croatian	
Range				24.50	25.00	26.40	4.30	22.10		
Average Price				10.36	10.10	11.33	10.65	10.61		
Average Import				11.20	9.05	12.00		10.75		
Average BH				10.22	10.36	11.22	10.65	10.61		
Difference				0.98	-1.31	0.78		0.15		
Percent Difference				10%	-13%	7%		0.01		
Banja Luka	Butter		Kg	4.00		7.20		3.20	BiH: BL Mljekara	
Banja Luka	Butter		Kg		6.40	8.00		1.60	Germany	
Sarajevo	Butter		250 g	4.00	4.20	4.40		0.40	BH	
Sarajevo	Butter		250 g	7.20	7.20	7.60		0.40	Ger	
Sarajevo	Butter		500 g	6.00	6.20	6.00		0.20	BH	
Sarajevo	Butter		1 kg	4.00	4.00	4.30		0.30	BH	
Mostar	Butter		250 gr		7.72		10.00	2.28	BiH	
Mostar	Butter		250 gr		6.32		6.40	0.08	Germany	
Tuzla	Butter		Kg.		6.90	6.20		0.70	Croatian	
Tuzla	Butter		Kg.		7.16	7.20		0.04	Slovenia	
Tuzla	Butter		Kg.		2.76	2.80		0.04	BH: Tuzla dairy	
Range				3.20	4.96	5.20	3.60	2.00		
Average Price				5.04	5.89	5.97	8.20	6.27		
Average Import				7.20	6.80	7.25	6.40	6.91		
Average BH				4.50	4.98	4.94	10.00	6.10		
Difference				2.70	1.82	2.31	-3.60	0.81		
Percent Difference				60%	37%	47%		0.48		

Pricepoint Data

Dairy

Location	Item		Item Size	Conversion Price (Kg/KM)				Price Range	Origin	Differentiation
				P1	P2	P3	P4			
	Product	Category		Green	Supermark	Grocery	Retail			
Banja Luka	Yogurt		Kg	0.85	0.90	1.00		0.15	BiH: BL Mljekara	
Banja Luka	Yogurt		Kg	1.00	1.40	0.90		0.50	BiH: Mljekoprodukt	
Banja Luka	Yogurt		Kg		1.50			0.00	Croatia: Dukat	
Sarajevo	Drinking Yogurt		500 g	2.00	1.80	2.00		0.20	Croa	
Sarajevo	Drinking Yogurt	Bioactive	350 g	5.72	5.15	5.72		0.57	Croa	Bioactive
Sarajevo	Drinking Yogurt	Farm	1 L	0.70	0.80	0.90		0.20	BH farm	Farm
Sarajevo	Drinking Yogurt		1 L	1.30	1.40	1.40		0.10	BH	
Mostar	Yoghurt		Lt	1.58		1.49		0.09	BiH	
Mostar	Yoghurt		500 gr	1.58		1.50		0.08	BiH	
Mostar	Yoghurt		Lt	1.50		1.05		0.45	BiH	
Mostar	Yoghurt		Lt	1.83		2.00		0.17	Croatia	
Tuzla	Yoghurt	Plain	Kg.		1.25	1.35		0.10	BH: Tuzla dairy	
Tuzla	Yoghurt	Plain	Kg.		1.50	1.50		0.00	BH: Sappit/Meggle	
Tuzla	Yoghurt	Plain	Kg.		1.67	1.80		0.13	Dukat Croatia	
Tuzla	Yoghurt	Plain	Kg.		1.70	1.85		0.15	Slovenia	
Sarajevo	Eating Yogurt	Plain	180 g	3.33	2.89	3.33		0.44	BH (P1), Croa (P2/P3)	
Sarajevo	Eating Yogurt	Fruit	180 g	4.96	4.44	4.96		0.52	Croa	
Sarajevo	Eating Yogurt	Fruit	250 g	3.20	3.20	3.60		0.40	Ger	
Range				4.22	3.90	4.67		0.77		
Average Price				2.27	2.11	2.14		2.18		
Average Import				3.54	2.79	3.16		3.16		
Average BH				1.48	1.21	1.23		1.31		
Difference				2.06	1.59	1.93		1.86		
Percent Difference				139%	131%	156%		1.42		
Banja Luka	Cream	Sour cream	Kg	3.50	3.50	4.50		1.00	BiH	BL Mljekara
Banja Luka	Cream	Sour cream	Kg	4.00	3.50	5.00		1.50	BiH	Mljekoprodukt
Banja Luka	Cream	Sour cream	Kg	4.00				0.00	BiH	Homemade
Sarajevo	Cream	Sour cream	125 g	8.80	8.00	9.60		1.60	BH	
Sarajevo	Cream	Flavored	250 g	7.20	7.20	8.00		0.80	BH	
Sarajevo	Cream	Plain	500 g	6.40	7.00	7.10		0.70	BH	
Tuzla	Cream	Sour Cream	Kg.	4.00	2.76	2.80		1.24	BH: Tuzla dairy Local	
Tuzla	Cream	Sour Cream	Kg.		3.40	3.80		0.40	Croatian	
Tuzla	Cream	Sour Cream	Kg.	4.00	5.56	5.60		1.60	BH: Tuzla/Sappit/Imner	
Range				6.04	5.20	9.60		4.40		
Average Price				5.24	5.12	5.80		5.38		
Average Import					3.40	3.80		3.60		
Average BH				5.24	5.36	6.09		5.56		
Difference				-5.24	-1.96	-2.29		-3.16		
Percent Difference					-37%	-38%		-0.37		

Pricepoint Data

Flour

Location	Item		Item Size	Conversion Price (Kg/KM)				Price Range	Origin	Differentiation
				P1	P2	P3	P4			
	Product	Category		Green	Supermark	Grocery	Retail			
Banja Luka	Flour	Wheat	Kg		1.50	1.50		0.00	BiH	
Banja Luka	Flour	Wheat	Kg		1.40	1.40		0.00	Serbia	
Banja Luka	Flour	Wheat	Kg			1.50		0.00	Serbia	
Banja Luka	Flour	Wheat	Kg		1.10			0.00	BiH	
Mostar	Flour	Wheat	1 kg		1.28		1.30	0.02	BiH	
Mostar	Flour	Wheat	1 kg		1.18		1.30	0.12	Croatia	
Sarajevo	Flour	Wheat	1 kg	1.00	1.10	1.20		0.20	BH	
Sarajevo	Flour	Corn	1 kg	1.30	1.30	1.40		0.10	BH	
Sarajevo	Flour	Wheat	2 kg	1.10	2.20	2.25		1.15	BH	
Sarajevo	Flour	Wheat	25 kg	0.60	0.60	0.60		0.00	BH	
Tuzla	Flour	Wheat	Kg.		0.9	0.95		0.05	Croatian	Paper Bags Normal/5 kg
Tuzla	Flour	Wheat	Kg.		0.69	0.69		0.00	BH: Tuzla	Paper Bags Normal/5 kg
Tuzla	Flour	Wheat	Kg.		0.86	0.86		0.00	BH: Tuzla	Paper Bags Normal/1 kg
Tuzla	Flour	Wheat	Kg.		0.89	0.9		0.01	BH: Sarajevo	Paper Bags Normal/1kg
Range				0.70	1.60	1.65	0.00	1.65		
Average Price				1.00	1.15	1.20	1.30			
Average Import					1.16	1.28	1.30	1.25		
Average BH				1.00	1.15	1.18	1.30	1.16		
Difference				-1.00	0.01	0.11	0.00	-0.22		
Percent Difference					1%	9%	0%	0.03		
									BH	Low Quality
Tuzla	Pasta				2.12				Italian	Better quality
Tuzla	Pasta				3.30					

Location	Item		Item Size	Conversion Price (Kg/KM)				Price Range	Origin	Differentiation
				P1	P2	P3	P4			
	Product	Category		Green	Supermark	Grocery	Retail			
Banja Luka	Poultry	Broilers	Kg	4.00		4.10		0.10	BiH	
Banja Luka	Poultry	Broilers	Kg	4.00	3.90	4.00		0.10	BiH	
Banja Luka	Poultry	Broilers	Kg		4.30			0.00	Slovenia	
Banja Luka	Poultry	Broilers	Kg	4.00		4.10		0.10	BiH	
Mostar	Poultry	Broilers	Kg		4.49		5.45	0.96	Imported	
Sarajevo	Poultry	whole fresh	Kg		3.98	4.80	4.00	0.82	BH	
Sarajevo	Poultry	breast	Kg		7.12	8.90	8.50	1.78	BH	
Sarajevo	Poultry	legs	Kg		3.47	6.00	6.00	2.53	BH	
Sarajevo	Poultry	drumstick	Kg		4.95		5.50	0.55	BH	
Sarajevo	Poultry	wings	Kg		4.85		4.00	0.85	BH	
Sarajevo	Poultry	offal	Kg		4.16		5.50	1.34	BH	
Sarajevo	Poultry	sausage raw	Kg		8.20	9.00	10.00	1.80	BH	
Sarajevo	Poultry	breast cooked	Kg		10.30	12.00	10.90	1.70	BH	
Tuzla	Poultry	Broilers	Kg	4.50	4.65			0.15	BH	
Tuzla	Poultry	Broilers	Kg	4.60	4.65			0.05	Imported	Frzn
Range				0.60	6.83	8.00	6.90	7.40		
Average Price				4.22	5.31	6.61	6.65	5.70		
Average Import				4.60	4.48		5.45	4.84		
Average BH				4.13	5.56	6.61	6.80	5.77		
Difference				0.48	-1.08	-6.61	-1.35	-2.14		
Percent Difference				12%	-19%		-20%	-0.09		
Banja Luka	Eggs		KM/kom		2.10	2.10	2.70	0.60	BiH	
Sarajevo	Eggs	class A	10 Carton		3.75	3.00		0.75	BiH	
Sarajevo	Eggs	class B	10 Carton		3.00	2.55	2.85	0.45	BiH	
Tuzla	Eggs		10 Carton		3.00	2.40		0.60	BiH	
Range				0.00	1.65	0.90	0.15	1.65		
Average Price					2.96	2.51	2.78	2.75		
Average Import				NA	NA	NA	NA			
Average BH					2.96	2.51	2.78	2.75		
Difference										
Percent Difference										

1. 1 egg = 66 grams, 1 egg carton = 660 grams

Location	Item		Item Size	Conversion Price (Kg/KM)				Price Range	Origin	Differentiation
				P1	P2	P3	P4			
	Product	Category		Green	Supermark	Grocery	Retail			
Mostar	Apple	fresh	Kg	1.75	2.10		2.00	0.35	BH	
Tuzla	Apple	Fresh	Kg.	1.75	1.80	1.80		0.05	BH	
Banja Luka	Apples	fresh	Kg	1.50	1.20	1.30		0.30	BH	
Range				0.25	0.90	0.50	0.00	0.30		
Tuzla	Appricot	Fresh	Kg.					0.00	BH	
Range				0.00	0.00	0.00	0.00	0.00		
Banja Luka	Grapes	fresh	Kg	2.00	2.00	2.50		0.50	BH	
Mostar	Grapes	fresh	Kg	3.20	2.50		2.50	0.70	BH	
Tuzla	Grapes	Fresh	Kg.	2.50				0.00	BH	
Range				1.20	0.50	0.00	0.00	0.70		
Tuzla	Juniper	Fresh	Kg.					0.00	BH	
Range										
Tuzla	Mellon	Fresh	Kg	1.00				0.00	BH	
Range										
Mostar	Peach	Fresh	Kg	2.75	3.60		3.00	0.85	BH	
Tuzla	Peach	Fresh	Kg.	2.50	2.75	2.80		0.30	BH: Herzegovina Farms	
Range				0.25	0.85	0.00	0.00	0.55		
Tuzla	Pears	Fresh	Kg.	2.50				0.00	BH	
Range										
Tuzla	Plum	Fresh	Kg.	0.80				0.00	BH	
Range										
Tuzla	Strawberry	Fresh	Kg.					0.00	BH	
Range										
Tuzla	Watemelon	Fresh	Kg	0.30				0.00	BH	
Range										
Tuzla	Appricot	Jam	Kg.		5.72	5.90		0.18	Croatia	Glass jar
Tuzla	Appricot	Jam	Kg.		3.40	3.90		0.50	BH: Vegafruit	Glass jar
Tuzla	Peach	Jam	Kg.		3.28	3.60		0.32	BH: Vitaminka B/L	Glass jar
Tuzla	Peach	Jam	Kg.		3.40	3.90		0.50	BH: Vegafruit	Glass jar
Tuzla	Plum	Jam	Kg.		5.15	5.65		0.50	Podravka Croatia	Glass jar
Tuzla	Plum	Jam	Kg.		3.17	3.30		0.13	BH: Vitaminka B/L	Glass jar
Tuzla	Plum	Jam	Kg.		3.45	3.90		0.45	BH: Vegafruit	Glass jar
Tuzla	Strawberry	Jam	Kg.		4.42			0.00	BH: Vitaminka B/L	Glass jar
Range				0.00	2.55	2.60	0.00	2.60		
Average Price				#DIV/0!	4.00	4.31	#DIV/0!	#DIV/0!		
Average Import					5.44	5.78		5.61		
Average BH					3.52	3.72		3.62		
Difference				0.00	1.92	2.06	0.00	0.99		
Percent Difference					54%	55%		0.55		
Tuzla	Apple	Juice	Kg.		2.13	2.35		0.22	BH: Vegafruit	Glass Bottles/Tetrapack
Tuzla	Apple	Juice	Kg.		3.60	3.78		0.18	Italy	Granini/Fancy Bottles
Tuzla	Appricot	Juice	Kg.		3.72	3.80		0.08	Italy	Granini/Fancy Bottles
Tuzla	Juniper	Juice	Kg.		2.12	2.42		0.30	BH: Vegafruit	Glass Bottles/Tetrapack
Tuzla	Juniper	Juice	Kg.		3.72	4.00		0.28	Italy	Granini/Fancy Bottles
Tuzla	Peach	Juice	Kg.		2.13	2.35		0.22	BH: Vegafruit	Tetrapack
Tuzla	Peach	Juice	Kg.		2.20	2.60		0.40	BH: Vitaminka BL	Glass Bottles/Tetrapack
Tuzla	Peach	Juice	Kg.		3.58	3.80		0.22	Italy	Granini/Fancy Bottles
Tuzla	Peach	Juice	Kg.		3.54	3.80		0.26	Italy	Granini/Fancy Bottles
Tuzla	Peach	Juice	Kg.		1.55	1.50		0.05	Slovenia	Tetrapack
Tuzla	Strawberry	Juice	Kg.		2.43	2.67		0.24	BH: Vegafruit	Glass Bottles/Tetrapack
Tuzla	Strawberry	Juice	Kg.		2.79	2.90		0.11	Slovenia	Glass Bottles/Tetrapack
Range				0.00	2.17	2.50	0.00	2.50		
Average Price				#DIV/0!	2.79	3.00	#DIV/0!	#DIV/0!		
Average Import					3.21	3.37		3.29		
Average BH					2.20	2.48		2.34		
Difference				0.00	1.01	0.89	0.00	0.48		
Percent Difference					46%	36%		0.41		

Location	Item		Item Size	Conversion Price (Kg/KM)				Price Range	Origin	Differentiation
				P1	P2	P3	P4			
	Product	Category		Green	Supermark	Grocery	Retail			
Banja Luka	Mushrooms	canned	Kg		8.00	9.00		1.00	Austria	
Banja Luka	Tomatoes	canned	Kg			2.00		0.00	Austria	
Range				0.00	0.00	7.00	0.00	7.00		
Average Import					8.00	5.50		6.75		
Average BH				NA	NA	NA	NA			
Difference										
Banja Luka	Beans	Fresh	Kg	6.00	5.00	5.00		1.00	BiH	
Banja Luka	Beans	Fresh	Kg	3.00	2.20	3.50		1.30	import - China	
Tuzla	Beans	Fresh	Kg	2.50				0.00		
Range				3.50	2.80	1.50		2.00		
Tuzla	Beetroot	Fresh	Kg	1.00				0.00		
Tuzla	Cabbage	Fresh	Kg	0.50				0.00		
Banja Luka	Cabbage	Fresh	Kg	0.80	0.90	1.00		0.20	BiH	
Tuzla	Carrots	Fresh	Kg	2.00	2.20	2.20		0.20	Domestic	
Tuzla	Cucumbers	Fresh	Kg	0.50				0.00		
Tuzla	Eggplant	Fresh	Kg	0.75				0.00		
Tuzla	Garlic	Fresh	Kg	2.50				0.00		
Banja Luka	Mushrooms	Fresh	Kg	5.00	4.90	5.50		0.60	BiH	
Tuzla	Mushrooms	Fresh	Kg	8.00				0.00		
Banja Luka	Onions	Fresh	Kg	1.00	0.90	1.00		0.10	BiH	
Mostar	Onions	Fresh	Kg	1.20	1.20		1.20	0.00		
Tuzla	Onions	Fresh	Kg	1.50				0.00		
Range				0.50	0.30	0.00	0.00	0.50		
Banja Luka	Peppers	Fresh	Kg	1.00	1.20	1.00		0.20	BiH	
Banja Luka	Peppers	Fresh	Kg	1.50		1.30		0.20	Macedonia	
Tuzla	Peppers	Fresh	Kg	0.80	1.50	1.80		1.00	BiH	
Range				0.70	0.30	0.80		0.50		
Banja Luka	Potatoes	Fresh	Kg	0.80	0.70	0.80		0.10	BiH	
Mostar	Potatoes	Fresh	Kg	1.20	1.20		1.00	0.20		
Tuzla	Potatoes	Fresh	Kg	0.80				0.00		
Range				0.40	0.50	0.00	0.00	0.50		
Banja Luka	Tomatoes	Fresh	Kg	0.90	0.80	1.00		0.20	BiH	
Mostar	Tomatoes	Fresh	Kg	1.35	1.56		1.80	0.45		
Tuzla	Tomatoes	Fresh	Kg	0.60	0.70	0.80		0.20		
Range				0.75	0.86	0.20	0.00	0.86		
Tuzla	Walnut	Fresh	Kg	3.00				0.00		
Tuzla	Tomato	Juice	Kg		2.07	2.10		0.03	Vegafruit	Glass Bottle
Tuzla	Tomato	Juice	Kg		3.71			0.00	Italan	Glass Bottle
Tuzla	Tomato	Juice	Kg		6.29	6.92		0.63	Podravka Croatia	Can
Tuzla	Tomato	Juice	Kg		4.52	4.97		0.45	Vegafruit	Can
Range				0.00	4.22	4.82	0.00	4.82		
Average Price				3.00	4.15	4.66	#DIV/0!			
Average Import					5.00	6.92		5.96		
Average BH					3.30	3.54		3.42		
Difference				0.00	1.71	3.39	0.00	1.27		
Percent Difference					52%	96%		0.74		

Tuzla	Tomato	Ketchup	Kg		3.30	3.60	0.30	Vegafruit	Plastic Tube
Tuzla	Tomato	Ketchup	Kg		3.73		0.00	Vitamika B/L	Simple,less fancy
Tuzla	Tomato	Ketchup	Kg		2.99		0.00	Croatia	Plastic Tube
Tuzla	Tomato	Ketchup	Kg		2.89		0.00	Serbia	Plastic Tube
Range				0.00	0.84	0.00	0.00	0.84	
Average Price				#DIV/0!	3.23	3.60	#DIV/0!	#DIV/0!	
Average Import					2.94			2.94	
Average BH					3.52	3.60		3.56	
Difference				0.00	-0.57	-3.60	0.00	-1.04	
Percent Difference					-16%			-0.16	
Tuzla	Carrot	Pickled	Kg	0.50	5.16			4.66	Import	Glass Jar
Tuzla	Cucumbers	Pickled	Kg		6.96	7.00		0.04	Vitaminka BL	Glass Jar
Tuzla	Cucumbers	Pickled	Kg		5.87	6.00		0.13	Vegafruit	Glass Jar
Tuzla	Mushrooms	Pickled	Kg		4.35	4.78		0.43	Import	Can
Tuzla	Peppers	Pickled	Kg		4.35	4.44		0.09	Vitaminka	Glass Jar
Tuzla	Peppers	Pickled	Kg		4.16	4.16		0.00	Vegafruit	Glass jar
Range				0.00	2.80	2.84	0.00	2.84		
Average Price				0.50	5.14	5.28	#DIV/0!			
Average Import				0.50	4.76	4.78		3.35		
Average BH					5.34	5.40		5.37		
Difference				0.50	-0.58	-0.62	0.00	-0.18		
Percent Difference					-11%	-11%		-0.11		
Tuzla	Beetroot	Salad	Kg		3.11	3.40		0.29	Vitaminka B/L	Glass Jar
Tuzla	Beetroot	Salad	Kg		2.20			0.00	Flora brcko	Glass Jar
Tuzla	Beetroot	Salad	Kg		2.19	2.35		0.16	Vegafruit	Glass Jar
Range				0.00	0.92	1.05	0.00	1.05		
Average Price				#DIV/0!	2.50	2.88	#DIV/0!			
Average Import										
Average BH					2.50	2.88		2.69		
Difference				0.00	-2.50	-2.88	0.00	-1.34		
Percent Difference					NA	NA	NA			

Location	Item		Item Size	Conversion Price (Kg/KM)				Price Range	Origin	Differentiation
				P1	P2	P3	P4			
	Product	Category		Green	Supermark	Grocery	Retail			
Banja Luka	Honey	Specialty	Kg	8.00	9.00	7.00		2.00	BiH	
Mostar	Honey	Specialty	Kg		9.10		8.20	0.90	Croatia	
Mostar	Honey	Specialty	Kg		8.00		8.10	0.10	BiH	
Tuzla	Honey	Specialty	Kg	10.00				0.00	BiH	
Tuzla	Honey	Specialty	Kg		9.55			0.00	Import	Glass Jar
Tuzla	Honey	Specialty	Kg		10.88			0.00	Import	Glass Jar
Range				2.00	2.88		0.10	2.78		
Average Price				9.00	9.31	7.00	8.15			
Average Import					9.84		8.20	9.02		
Average BH				9.00	8.50	3.50	8.10	7.28		
Difference										
Percent Difference					16%		1%	0.09		
Tuzla	Cooking Oil	Specialty			1.70				Import	Plastic

	Green	Supermarke	Grocery	Retail
Honey	9.00	9.31	7.00	8.15

	Supermarke	Retail
Honey	0.16	0.01

ATTACHMENT 4

RECORD OF MEETINGS WITH KEY INFORMANTS

SARAJEVO OFFICE

- KLAS Bakery
- Brajlovic Meat
- Saraj Milk
- Akova Impex
- RVR Poultry
- Pariz Bulls
- SEED
- KLAS–Wheat
- KLAS Berries
- Pharmamed
- Bekto Packaging
- SIDA
- Assoc. Potato Producers-Fed
- Agricultural Institute–Fed
- ZEPS Trade Fair
- Ferimpex–Goldy Snacks
- MAP Ass-Fed
- Poultry Ass–Fed
- Foreign Trade Chamber-Fed
- EU Reg Ec Dev (EU RED)
- Land O' Lakes dairy project
- IFAD
- Commerce Bank, Sarajevo
- EU Return Monitoring Unit
- Proven packaging company
- CRQ–Consulting
- Ferimpex
- ZZ Jelah
- Krehic
- ZEPOLJ
- ZIM
- Cooperative Association BiH
- ZZ Ilidza
- ZZ Fojnica
- ZZ Agrokop
- ZZ Poljoprodukt
- ZZ Behar
- Poljorad
- Rostovo
- E-NetCenter
- Butmir Farm
- Halilovic DOO
- GIN
- Faveda
- PPERP—Post-privatization Enterprise Restructuring Project, DFID
- Partners for Development
- OHR

MOSTAR OFFICE

- BiH Wine Producers Association
- Institute of Agriculture, University of Mostar
- Nordfish
- Citluk Chamber of Commerce
- Lura Milk
- PRIZMA
- World Bank, Small-Scale Commercial Agricultural Development Project
- Ivica Vlasic (BiH veterinarian and sheep farmer)
- Marko Raguz (honey producer from Stolac)
- Hepok
- Ibrahim Kujan (seed potato farmer in Nevesinje)
- BiH Fish Farmers Association
- Sunce Co-op in Capljina
- Stenko Vasilj (wine producer in Medugorje)
- Agroplod, Stolac
- Pudja & Perkovic Mjedara doo (producers of Livno-type cheese)
- Vrtlarija Saric (importers of cut flowers and potted plants from Holland)
- OHR, Mostar office
- Agroneretva
- Agrohercegovina
- Ancora, fish farm in Neum
- Domanovici Winery
- BiH Wine Producers Association
- Zagrebacka Bank
- Jelavic-Ljubuski
- Konjic Milk
- DuBrave Co-op in Capljina

TUZLA OFFICE

- OHR Economics Section
- Volksbank/Sarajevo
- Fruit & Vegetable processors association meeting
- Djeno egg laying farm
- ZZ Modrica
- Volksbank/Tuzla
- Cantonal Chamber of Commerce
- Kiko–Bimal
- Odzak (milk processor, veterinarian station)
- ZZ Agroobjeda in Vidovice
- ZZ Maoca
- Biljiana
- Bosnaplod
- Citizens Association "Sustainable Return" in Bilejina
- ZZ Vakufljanka
- Citizens Association, Janja, in Janja
- Husinski
- Kiko
- Helix
- Zagrebacka Bank
- Celic Dairy
- Malinjak cooperative in Lukovac
- Vegafruit
- MercyCorps
- Immer Dairy
- Cantonal Institute of Agriculture
- DEZA/GTZ
- Ratar (privatized cooperative in Novi Grad/Odzak
- Koko Dzada in Gracanica
- President of Banovici municipality assembly
- Tanja Muhic (from OHR)
- Agropex
- Tuzla Advisory Coordinating Committee (donors active in agriculture in Tuzla)
- Bimal
- SAVA

BANJA LUKA OFFICE

- Tulumovic
- DSW
- Meggle
- Mljekoprodukt
- Tropic
- Society of Agricultural Producers—Republic of Srpska
- Chamber of Economy of Banja Luka Region
- Vitaminka in BL
- Poultry Association
- Banja Luka Dairy
- Super Premix
- Vitmark
- Veterinary Institute—BL
- Agrounija
- Agriculture Projects Coordination Unit, Ministry of Agriculture—RS
- PPERP—Post-privatization Enterprise Restructuring Project, DFID
- Volksbank
- IFAD
- BiH Association of Ag. Producers
- RS Minister of Agriculture
- Rabbit Association
- Agrocimex
- Vrtoce Ag. Cooperative
- Jezerka
- SEED meeting in Bihac on Herbs sector
- Terranova
- Una-Sana Canton Ministry of Agriculture
- Slapovi
- Agrosped
- Zagrebacka Bank
- Farmers Organization from Gradiska
- Mijekara Sipovo
- AGROJAPRA—Farmers' Cooperative
- Agricultural Institute "Vaso Pelagoc" in Laktasi
- EL-PAK
- UNIDO

ATTACHMENT 5

T-ACCOUNT ANALYSIS
BASED ON LAMP PROJECT CRITERIA

PRODUCTS

Criterion	Criterion Rank	Beef&Veal		Berries		Butter		Cheese		Cut Flowers		Dairy/Milk		Eggs		Fish		Flour		Fresh Fruit		Fresh Veg.		Grapes/Wine		Herbs	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
Potential for broad based impact	3	3		1		3		3			3	3			1		3		2	2		2		1			1
Potential market through substitution of imports[1]	3		3	1		3			1	2		2		1		1		2		2			2	1			1
Existing market conditions: trends in volume/growth/value[2]	2		1	1		1			1		3	2			2		1		2	2		2		1		2	
Export Potential	2		1	3			1	2			3		1		1	3			3	1		1		2		3	
Significance of sectoral constraints[3]	2		2		1	3		2		1			2	2		1		1			3	2		1			1
Opportunities to diversify away from low-cost strategies	1	2		2		2		2		2		3		1		1		1		2		2		2		2	
Historical production/processing ability[4]	1	3		1			1	2			3	2			1		2	3		1		2		2		1	
Distinctive/unique product characteristics	1		2	2		1		3		2		1		1		3		1		1		1		3		3	
Score		14	19	19	2	29	3	23	5	11	24	25	6	9	10	16	13	13	16	22	6	21	6	21	0	16	8
Balance		-5		17		26		18		-13		19		-1		3		-3		16		15		21		8	

Rank: Criterion intensity, 3 is highest
Weight: 3 = Stong, 2 = Medium, 1 = Weak
Score: Calculated by multiplying the Criterion Rank by its weight

[1]See Table: BiH Market Share
[2]See chart: Market Potential by Product Value. See Box for scoring breakdown
[3]See Value Chain Constraints Assessment (score: 10-19 = 3 to 60+ = -3)
[4]Source: Statistical Yearbooks, Belgrade, 1918-1988

Volume/Growth/Value Scoring
>25,000 MT/ > 10%/ > $5 = 3
>25,000 MT/ > 5%/ < $5 = 2
<25,000 MT/ > 5%/ > $5 = 1
<25,000 MT/ < 5%/ > $5 = -1
>25,000 MT/ < 5%/ < $5 = -2
<25,000 MT/ < 5%/ < $5 = -3

PRODUCTS

Criterion	Criterion Rank	Honey		Ice Cream		Jam/Marmalade		Juice/Syrup		Lamb/Mutton		Maize/Feed		Meat Processed		Pork/Products		Potato/Seed		Poultry/broilers		Yogurt	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
Potential for broad based impact	3		2		3	2		2		2		1		3		2		2		1		3	
Potential market through substitution of imports[1]	3		1	3			1	1			3		1	3		2			3	2		2	
Existing market conditions: trends in volume/growth/value[2]	2	1		1			1	1			1	2			1	3		1		2		1	
Export Potential	2		1		2		1		1	1			3		1	1			3		1		1
Significance of sectoral constraints[3]	2	1		3			2		1	1		3		2		2		1			2	2	
Opportunities to diversify away from low-cost strategies	1		1	1		3		3		1		1		1		2		2		3		2	
Historical production/processing ability[4]	1		2		2		2	1		1		3		2		2		3		1		1	
Distinctive/unique product characteristics	1	3		3		2		3		1		1		2		2		1		2		3	
Score		7	14	21	15	11	13	17	4	13	11	18	9	27	4	30	0	16	15	19	6	27	2
Balance		-8		6		-2		13		2		9		23		30		1		13		25	

PRODUCTS (Minus Exports)

Criterion	Criterion Rank	Beef&Veal		Berries		Butter		Cheese		Cut Flowers		Dairy/Milk		Eggs		Fish		Flour		Fresh Fruit		Fresh Veg.		Grapes/Wine		Herbs	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
Potential for broad based impact	3	3		1		3		3			3	3			1		3		2	2		2		1			1
Potential market through substitution of imports[1]	3		3	1		3			1	2		2		1		1		2		2			2	1			1
Existing market conditions: trends in volume/growth/value[2]	2		1	1		1			1		3	2			2		1		2	2		2		1		2	
Significance of sectoral constraints[3]	2		2		1	3		2		1			2	2		1		1			3	2		1			1
Opportunities to diversify away from low-cost strategies	1	2		2		2		2		2		3		1		1		1		2		2		2		2	
Historical production/processing ability[4]	1	3		1			1	2			3	2			1		2	3		1		2		2		1	
Distinctive/unique product characteristics	1		2	2		1		3		2		1		1		3		1		1		1		3		3	
Score		14	17	13	2	29	1	19	5	11	18	25	4	9	8	10	13	13	10	20	6	19	6	17	0	10	8
Balance		-3		11		28		14		-7		21		1		-3		3		14		13		17		2	

Rank: Criterion intensity, 3 is highest

Weight: 3 = Stong, 2 = Medium, 1 = Weak

Score: Calculated by multiplying the Criterion Rank by its weight

[1]See Table: BiH Market Share

[2]See chart: Market Potential by Product Value

[3]See Value Chain Constraints Assessment (score: 10-19 = 3 to 60+ = -3)

[4]Source: Statistical Yearbooks, Belgrade, 1918-1988

Volume/Growth/Value Scoring
>25,000 MT/ > 10%/ > $5 = 3
>25,000 MT/ > 5%/ < $5 = 2
<25,000 MT/ > 5%/ > $5 = 1
<25,000 MT/ < 5%/ > $5 = -1
>25,000 MT/ < 5%/ < $5 = -2
<25,000 MT/ < 5%/ < $5 = -3

PRODUCTS (Minus Exports)

Criterion	Criterion Rank	Honey		Ice Cream		Jam/Marmalade		Juice/Syrup		Lamb/Mutton		Maize/Feed		Meat Processed		Pork/Products		Potato/Seed		Poultry/broilers		Yogurt	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
Potential for broad based impact	3		2		3	2		2		2		1		3		2		2		1		3	
Potential market through substitution of imports[1]	3		1	3			1	1			3		1	3		2			3	2		2	
Existing market conditions: trends in volume/growth/value[2]	2	1		1			1	1			1	2			1	3		1		2		1	
Significance of sectoral constraints3	2	1		3			2		1	1		3		2		2		1			2	2	
Opportunities to diversify away from low-cost strategies	1		1	1		3		3		1		1		1		2		2		3		2	
Historical production/processing ability4	1		2		2		2	1		1		3		2		2		3		1		1	
Distinctive/unique product characteristics	1	3		3		2		3		1		1		2		2		1		2		3	
Score		7	12	21	11	11	11	18	2	11	11	18	3	27	2	28	0	16	9	19	4	27	0
Balance		-6		10		0		16		0		15		25		28		7		15		27	

PRODUCTS (Minus Broad-Based Impacts)

Criterion	Criterion Rank	Beef&Veal		Berries		Butter		Cheese		Cut Flowers		Dairy/Milk		Eggs		Fish		Flour		Fresh Fruit		Fresh Veg.		Grapes/Wine		Herbs	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
Potential market through substitution of imports[1]	3		3	1		3			1	2		2		1		1		2		2			2	1			1
Existing market conditions: trends in volume/growth/value[2]	2		1	1		1			1		3	2			2		1		2	2		2		1		2	
Export Potential	2		1	3			1	2			3		1		1	3			3	1		1		2		3	
Significance of sectoral constraints[3]	2		2		1	3		2		1			2	2		1		1			3	2		1			1
Opportunities to diversify away from low-cost strategies	1	2		2		2		2		2		3		1		1		1		2		2		2		2	
Historical production/processing ability[4]	1	3		1			1	2			3	2			1		2	3		1		2		2		1	
Distinctive/unique product characteristics	1		2	2		1		3		2		1		1		3		1		1		1		3		3	
Score		5	19	16	2	20	3	14	5	11	15	16	6	9	7	16	4	13	10	16	6	15	6	18	0	16	5
Balance		-14		14		17		9		-4		10		2		12		3		10		9		18		11	

Rank: Criterion intensity, 3 is highest
Weight: 3 = Stong, 2 = Medium, 1 = Weak
Score: Calculated by multiplying the Criterion Rank by its weight

[1]See Table: BiH Market Share
[2]See chart: Market Potential by Product Value
[3]See Value Chain Constraints Assessment (score: 10-19 = 3 to 60+ = -3)
[4]Source: Statistical Yearbooks, Belgrade, 1918-1988

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>25,000 MT/ > 10%/ > $5 = 3
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>25,000 MT/ < 5%/ < $5 = -2
<25,000 MT/ < 5%/ < $5 = -3

PRODUCTS (Minus Broad-Based Impacts)

Criterion	Criterion Rank	Honey		Ice Cream		Jam/Marmalade		Juice/Syrup		Lamb/Mutton		Maize/Feed		Meat Processed		Pork/Products		Potato/Seed		Poultry/broilers		Yogurt	
		+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
Potential market through substitution of imports1	3		1	3			1	1			3		1	3		2			3	2		2	
Existing market conditions: trends in volume/growth/value2	2	1		1			1	1			1	2			1	3		1		2		1	
Export Potential	2		1		2		1		1	1			3		1	1			3		1		1
Significance of sectoral constraints3	2	1		3			2		1	1		3		2		2		1			2	2	
Opportunities to diversify away from low-cost strategies	1		1	1		3		3		1		1		1		2		2		3		2	
Historical production/processing ability4	1		2		2		2	1		1		3		2		2		3		1		1	
Distinctive/unique product characteristics	1	3		3		2		3		1		1		2		2		1		2		3	
Score		7	8	21	6	5	13	12	4	7	11	15	9	18	4	24	0	10	15	16	6	18	2
Balance		-2		15		-8		8		-4		6		14		24		-5		10		16	